GenCore version 5.1.6 Copyright (c) 1993 - 2003 Compugen Ltd.

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Result
No.
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Maximum DB seq length: 2000000000
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                                                                                                                                                                                                                               Score
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AAY05955
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22	22	22	22	22	22	22	22	22	22	49	191	191	191	248	259	259	259	269	269	269	272	272	284	284	341	341	341	379	410	410	410	410	410	410
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AAW30661	AAW36189	AAW36187	AAW36188	AAB84838	AAY44635	AAW36183	AAW36190	AAB84839	AAB84840	AAY05960	ABB74949	AAB11317	AAY41032	AAY50998	AAY05962	AAY05963	AAY05964	ABB74992	AAB11360	AAY43135	ABB74989	AAB11357	AAY05958	AAY05961	AAY05956	ABB74994	AAB11362	-AAY05957	ABB74993	AAY50997	AAB11361	4	$\frac{1}{212}$	AAB11358
Human NBS-1 alpha	tumour			otein	p73 b	Monkey p53 tumour			gamma p	Mouse cell regulat	Human lung tumour		Human lung tumor a	Rat KET protein.	_		-	p53				ס	cell	regula	cell	p53	Human p63 protein	cell	p53	KET	p63 protein	p53 homolog	prot	Human p63 protein

ALIGNMENTS

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(SAKA) OTSUKA F	27-MAR-1998;	24-MAR-1999;	07-OCT-1999.	W09950412-A1.		Domain		Domain		Domain	Key		Homo sapiens.		tumour suppres	Human: p51: p5	Human psi protein A.		07-JAN-2000 (AAY45246;		AAY45246 stand	5246
OTSUKA PHARM CO LTD. IKAWA Y.	98JP-0100467.	99WO-JP01512.			/label= oligomerisation_domain	353397	/label- DNA_binding_domain	142321	/label= transactivation_domain	159	Location/Qualifiers			•	tumour suppression; diagnosis.	Human: p51: p53 related gene: cell proliferation; regulation; cancer;	ein A.		(first entry)				AAY45246 standard; Protein; 448 AA.	

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RESULT 2
AAYO5955
ID AAYO
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AC AAYC
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Cell
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Best Local
 Cell regulatory protein; p63; huTAp63 gamma; TAp63 gamma; cancer; tumour suppressor; cell cycle control; apoptosis; cell proliferation; cell differentiation; therapy.
                                                   Human
                                                                     16-AUG-1999
                                                                                          AAY05955
                                                                                                            AAY05955 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The present sequence represents a human p51 protein, which is related to p53 and has cell proliferation regulation and tumour suppression activity. The p51 gene can be used in the investigation, diagnosis and treatment of diseases such as cancer, with which the p53 family cell proliferation regulation is associated. The p51 protein may be used for screening potential agonists and antagonists of its regulatory function, for use as drugs,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence
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N-PSDB; AAZ25770.
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                                               regulatory protein
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The present invention concerns the discovery of a new family of CC cell regulatory proteins (CRPs) termed the p63 family of proteins, CC which demonstrate certain sequence identity to known tumour suppressor proteins p53 and p73. It has been observed that the CC intron exon organisation is conserved between p73 and p53, and from CC identify new members of this gene family using a PCR-based strategy CC intron. The human p53 gene was localised to chromosomal position of amplifying 2 exons in a conserved domain and their intervening CC gamma forms, while p63 members differing in the N-terminus are CC gamma forms, while p63 members differing in the N-terminus are CC gamma forms, while p63 members differing in the N-terminus are CC transactivation domain. The present sequence represents human consisted as isotype TAp63 gamma. p63 was detected in a variety of activities, such as the ability to transactivate p53 reporter genes CC and induce apoptosis. Cessation or down-regulation of p63 expression CC differentiation, both benign and neoplastic. DeltaN isotopes of p63 may play a critical role in the process of cervical squamous can be implicated in haematopolesis, muscle wasting (e.g. cachexia) and meuronal differentiation and related degenerative cachexia) and neuronal differentiation and related degenerative compounds useful for treating disorders invention can be used to cachexia) and anti-p63 antibodies of the invention can be used to cachexia and anti-p63 antibodies of the invention can be used to cachexia and anti-p63 antibodies of the invention can be used to cachexia in and related in an and related to be used to cachexia in an and related in an and cachexia invention of the such cachexia in detection and diagnosis, and in the production of transacrival and in the production of transacri
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15-OCT-1997;
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PQGAVIRAMPVYKKAEHVTEVVKRCPNHELSREFNEGQIAPPSHLIRVEGNSHAQYVEDP
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97US-0062<u>076</u>
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17-DEC-1999;
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10-JAN-2000;
22-FEB-2000;
                        This invention describes a novel isolated polypeptide (I) which comprising an immunogenic portion of a lung tumor protein or variant (P2) which have cytostatic activity. The polypeptides and polynucleotides are used in compositions and vaccines to inhibit the development of cancer, especially lung cancer, in a patient. Methods described in the invention can be used to monitor the progression of a cancer by carrying out the detection at subsequent time points and points are solated from a patient are treated with P2, polynucleotides encoding P2 or antigen presenting cells expressing P2 and then administered to the patient to inhibit
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                  development of
                                                                                                                            Disclosure; Page 247-249; 261pp;
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2000US-0510376.
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Query Match

100.0%;

Score

448;

DB 21;

Length 448;

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Best Local Similarity Matches 448; Conserv
Chimera gene of the p53 family, useful for
                  WPI; 2001-268293/28
N-PSDB; AAF86588.
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                                               (IKAW/) IKAWA H.
(SAKA ) OTSUKA PHARM
                                                                                                                                                                                                                                                                            protein
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        28-JUN-2000; 2000US-0606421
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                                                                                                                      Human;
                                                                    WO200200174-A2
                                                                                      Homo sapiens
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                                                                                                                                                                                                   ABB74991 standard; Protein;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The present invention relates to a chimera gene of p53 family encoding transcription activating region, a DNA binding region, and an oligomer formation region of different p53 family proteins. The chimeric gene cabe used for gene therapy of p53 variant human tumours, and analysis of the function of the p53 family gene. The present sequence was used in t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence
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Best Local :
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21-AUG-2000;
15-SEP-2000;
09-OCT-2000;
12-DEC-2000;
07-MAY-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence
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McNeill
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DB; ABL49248.
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LVEPRRETPKQSDVFFRHSKPPNRSVYP
                                                      LLYLPVRGRETYEMLLKIKESLELMQYLPQHTIETYRQQQQQHQHLLQKHLLSACFRNE
                                                                                     FEARICACPGRDRKADEDSIRKQQVSDSTKNGDGTKRPFRQNTHGIQMTSIKKRRSPDDE
                                                                                                   FEARICACPGRDRKADEDSIRKQOVSDSTKNGDGTKRPFRQNTHGIQMTSIKKRRSPDDE
                                        LLYLPVRGRETYEMLLKIKESLELMQYLPQHTIETYRQQQQQQQHQHLLQKHLLSACFRNE
                                                                                                                                                                                                                                 MSQSTQTNEFLSPEVFQHIWDFLEQPICSVQPIDLNFVDEPSEDGATNKIEISMDCIRMQ
                                                                                                                                     ITGRQSVLVPYEPPQVGTEFTTVLYNFMCNSSCVGGMNRRPILIIVTLETRDGQVLGRRC
                                                                                                                                                   ITGRQSVLVPYEPPQVGTEFTTVLYNFMCNSSCVGGMNRRPILIIVTLETRDGQVLGRRC
                                                                                                                                                                                    PQGAVIRAMPVYKKAEHVTEVVKRCPNHELSREFNEGQIAPPSHLIRVEGNSHAQYVEDP
                                                                                                                                                                                                PQGAVIRAMPYYKKAEHYTEVVKRCPNHELSREFNEGQIAPPSHLIRVEGNSHAQYVEDP
                                                                                                                                                                                                                                                                                DSDLSDEMMPQYTNLGLLNSMDQQIQNGSSSTSPYNTDHAQNSVTAPSPYAQPSSTFDAL
                                                                                                                                                                                                                                                                                              DSDLSDPMWPQYTNLGLLNSMDQOIQNGSSSTSPYNTDHAQNSYTAPSPYAQPSSTFDAL
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TS,
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                                                                                                                                                                                                                                                                                                                                                                                100.0%;
ilarity 100.0%;
Conservative 0
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Fanger N,
Carter D,
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; 2000US-0643597.
; 2000US-0662786.
; 2000US-0685696.
; 2000US-0735705.
; 2001US-0850716.
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er N, Retter MW, Marnerakis M,
er D, Watanabe Y, Peckham DW;
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                                                                                                                                                                                                                                                                                                                                                                             Score 448; D
Pred. No. 0;
0; Mismatches
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immune response -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     English.
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Fanger GF
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AAY05954 standard;

Protein;

516

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Matches 410
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                                                                                                                                              Sequence
                                                                                                                                                                           transgenic
                                                                                                                                                                                                                             cachexia) and neuronal differentiation and related degenerative disorders. p63 polypeptides (see AAV05953·64), polynucleotides (:AAX38572-83) and anti-p63 antibodies of the invention can be used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Claim.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New isolated p63 cell regulatory
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15-OCT-1997;
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                                                                                                                                                                                                              dentify compounds useful
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DB; AAX58573.
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                                                                        al Similarity
410; Conser
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in detec
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                                                                      91.5%;
llarity 100.0%;
Conservative
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97US-0062076.
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                                                                                                                                                                                            for treating disorders involving od diagnosis, and in the production
                                                                      Score 410; DB Pred. No. 0; Mismatches
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RESULT 7
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10-JAN-2000;
22-FEB-2000;
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                                                                        Disclosure; Page 255-256; 261pp; English
                                                                                       Isolated polypeptide protein is used for c in a patient -
                                                                                                                                  WPI;
                                                                                                                                                                                                                                                                                                               Lung
                                                                                                                          N-PSDB;
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17-DEC-1999;
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                                                                                                                                                                                                                                                                                                        vaccine;
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                                                                                                                                                                                                                                                                                                        cancer; therapy; treatment; human; tumor; immunogenic; cytostatic;
ine; detection.
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                                                                                                                                                                  CORIXA CORP.
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2000US-0510376
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99US-0476496
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This invention describes a novel isolated polypeptide (I) which comprising an immunogenic portion of a lung tumor protein or variant (P2) which have cytostatic activity. The polypeptides and polypuncleotides are used in compositions and vaccines to inhibit the development of cancer, especially lung cancer, in a patient. Methods described in the invention can be used to monitor the progression of a cancer by carrying out the detection at subsequent time points and comparing the results from the different time points. CD4+ and/or CD8+ T-Cells isolated from a patient

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RESULT 8
ABB74995.
ID ABB74995
XX ABB7
XX ABB7
XX ABB7
XX ABB7
XX Huma
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Best Local Simi
Matches 410;
                                                                                             28-JUN-2000; 2000US-0606421.
02-AUG-2000; 2000US-0630940.
21-AUG-2000; 2000US-0643597.
15-SEP-2000; 2000US-0662786.
09-OCT-2000; 2000US-0685696.
12-DEC-2000; 2000US-0735705.
07-MAY-2001; 2001US-0850716.
                              Wang T,
McNeill
                Vedvick
                                                                        (CORI-)
                                                                                                                                                                                                                                                 03-JAN-2002.
                                                                                                                                                                                                                                                                                                                                                                Human p53 homologue isoform, p63 (L530S) protein SEQ ID NO:344.
                                                                                                                                                                                                                    28-JUN-2001; 2001WO-US21065
                                                                                                                                                                                                                                                                             WO200200174-A2
                                                                                                                                                                                                                                                                                                       Homo sapiens.
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         Wang A, Skeik
PD, Fanger N,
TS, Carter D,
             PD,
                                                                                                                                                                                                                                                                                                                                           lung tumour; lung cancer; cytostatic;
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                                                                                                                                                                                                                                                                                                                                    response.
                                                                      CORIXA CORP.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                              standard; Protein; 516
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Similarity
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    y YAW, Li SX, Kalos MD,
Retter MW, Marnerakis M,
Watanabe Y, Peckham DW;
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Pred. No.
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                  Henderson RA;
Fanger GR;
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Best Local
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Domain
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Matches 410;
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                                                                                                                                                          AAY45247 standard; Protein;
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N-PSDB; ABL49252.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Polynucleotides encoding lung tumor polypeptides, useful for treating lung cancer or stimulating an immune response -
                                                      p51 protein B
 p51; p53 related gene;
suppression; diagnosis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           61 DSDLSDPWWPQYTNIGLLNSWDQQIQNGSSSTSPYNTDHAQNSVTAPSPYAQPSSTFDAL
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diagnosis
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                                                                                                                                                           641
         cell proliferation; regulation;
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           cancer;
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Location/Qualifiers

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Best Local (
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The present sequence represents a human p51 protein, which is related to p53 and has cell proliferation regulation and tumour suppression activity. The p51 gene can be used in the investigation, diagnosis and treatment of diseases such as cancer, with which the p53 family cell proliferation regulation is associated. The p51 protein may be used for screening potential agonists and antagonists of its regulatory function,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence
                 AAY05953 standard; Protein;
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DB; AAZ25771.
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                                                                                        LLYLPVRGRETYEMLLKIKESLELMQYLPQHTIETYRQQQQQQHQHLLQK
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           641 AA;
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                                                                                                                                                                                       transactivation domain. The present sequence represents human to passe the sequence represents human states of the sequence represents human and mouse tissue. It demonstrates remarkably divergent to human and mouse tissue. It demonstrates remarkably divergent activities, such as the ability to transactivate p53 reporter genes and induce apoptosis. Cessation or down-regulation of p63 expression may play a critical role in the process of cervical squamous differentiation, both benign and neoplastic. DeltaN isotopes of p63 act as dominant negatives towards transactivation by p53 and p63. 2 act as dominant negatives towards transactivation by p53 and p63. 2 cachexia) and neuronal differentiation and related degenerative disorders. p63 polypeptides (see ANV5953-64), polypucleotides (see ANV58572-83) and anti-p63 antibodies of the invention can be used to identify compounds useful for treating disorders involving such processes, in detection and diagnosis, and in the production of
                                                                                                                                                                                                                                                                                                                                                                                                 The present invention concerns the discovery of a new family of cell regulatory proteins (CRPs) termed the p63 family of proteins, which demonstrate certain sequence identity to known tumour suppressor proteins p53 and p73. It has been observed that the intron-exon organisation is conserved between p73 and p53, and from known exon and intron sizes for these 2 genes, it was possible to identify new members of this gene family using a PCR-based strategy of amplifying 2 exons in a conserved domain and their intervening intron. The human p53 gene was localised to chromosomal position 3q27-29. At least 6 different isotypes exist. Splice variants of differing at the C-terminus have been designated as alpha, beta and gamma forms, while p63 members differing in the N-terminus are designated as deltaN and TA forms, where the deltaN form lacks the
                                                                                        Matches
                                                                                                      Query Match
Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Claim 23; Fig 9; 161pp; English.
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                                                                                                                                                  Sequence
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15-OCT-1997;
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                                                                                                                                                                             transgenic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             New isolated p63 cell regulatory protein for, e.g. treatment
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                                                                                                      Similarity
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DSDLSDPMWPQYTNLGLLNSMDQQIQNGSSSTSPYNTDHAQNSVTAPSPYAQPSSTFDAL 120
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                             MSQSTQTNEFLSPEVFQHIWDFLEQPICSVQPIDLNFVDEPSEDGATNKIEISMDCIRMQ
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                                                                                       Conservative
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970S-0062076.
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                                                                                                      91.5%;
100.0%;
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PR 11-JH
PR 10-JH
PR 1
       This invention describes a novel isolated polypeptide (I) which comprising an immunogenic portion of a lung tumor protein or variant (P2) which have cytostatic activity. The polypeptides and polynucleotides are used in compositions and vaccines to inhibit the development of cancer, in a patient. Methods described in the invention detection at subsequent time points and comparing the results from the different time points. CD4+ and/or CD8+ T-Cells isolated from a patient are treated with P2, polynucleotides encoding P2 or antigen presenting
                                                                                                                                                                                                                                                       Disclosure; Page 245-247;
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10-JAN-2000;
22-FEB-2000;
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vaccine; detection.
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02-AUG-2000;
21-AUG-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The present invention relates to a chimera gene of p53 family encoding transcription activating region, a DNA binding region, and an oligomer formation region of different p53 family proteins. The chimeric gene carbe used for gene therapy of p53 variant human tumours, and analysis of the function of the p53 family gene. The present sequence was used in the function of the p53 family gene. The present sequence was used in the function of the p53 family gene.
                                                                28-JUN-2001;
                                                                                                03-JAN-2002
                                                                                                                               WO200200174-A2
                                                                                                                                                                                                                                           Human
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 2000US-0606421.
2000US-0630940.
2000US-0643597.
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                                                                2001WO-US21065
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s a transcription activating
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09-OCT-2000;
12-DEC-2000;
07-MAY-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The present invention describes human lung tumour proteins. Human luntumour proteins and polynucleotides have cytostatic and immunostimula activities, and can be used in vaccine production. Compositions comprising the lung tumour proteins, polynucleotides, antibodies, fusion proteins. Total populations, or antigen presenting cells that express the lung tumour proteins are useful for treating lung cancer stimulating an immune response. ABL48959 to ABL49300 and ABB74946 to ABB75970 represent sequences used in the exemplification of the present accounts.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Wang T,
McNeill
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence
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DB; ABL49247.
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Carter
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immune response -
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W, Marnerakis M,
Y, Peckham DW;
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Fanger GR;
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                                                                                                                                                                                                                                                                Sequence
                                                                                                                                                                                                                                                                                                                                                                                    Disclosure; Page 250-253; 261pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   02-APR-1999;
17-DEC-1999;
30-DEC-1999;
10-JAN-2000;
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in a patient
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (CORI-)
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99US-0466396.
99US-0476496.
2000US-0480884.
2000US-0510376.
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This invention describes a novel KET-encoding nucleic acid (I) and its rangements, variants and mutants which has anticancer activity. (I) cencodes a protein, (II), involved in control of the cell cycle and composed a protein, i.e. (II) is a tumor suppressor protein which belongs to the cell cycle and composed in the polypeptide (II) encoded by it, are used (a) to compose the compose composed in the control of the cycle and cycle composed in the cycle and cycle cy
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; anticancer; cell cycle; apoptosis; tumor suppressor; p53 family; family; angiogenic; cytotoxic; cancer; human.
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                                                                                                                                                                                                                                                                                     MSQSTQTNEFLSPEVFQHIWDFLEQPICSVQPIDLNFVDEPSEDGATNKIEISMDCIRNQ
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Search completed: June 24, 2003, 22:25:49 Job time: 40 secs

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GenCore version 5.1.6
Copyright (c) 1993 - 2003 Compugen Ltd.
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

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Database :

SUMMARIES

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Sequence 341, App Sequence 341, App Sequence 152, App Sequence 152, App Sequence 10, Appl Sequence 9, Appl Sequence 4, Appl Sequence 4, Appl Sequence 4, Appl Sequence 4, Appl Sequence 40, Appl Sequence 40, Appl Sequence 26, Appl Sequence 26, Appl Sequence 26, Appl Sequence 26, Appl Sequence 26, Appl Sequence 26, Appl Sequence 36, Appl Sequence 36, Appl Sequence 36, Appl Sequence 36, Appl Sequence 36, Appl Sequence 37, Appl
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APPLICANT: McNeill, Patricia D.
APPLICANT: McNeill, Patricia D.
APPLICANT: McNeill, Patricia D.
APPLICANT: Enger, Nell
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY
TITLE OF INVENTION: AND DIAGNOSIS OF LUNG CANCER
FILE REFERRNCE: 210121.455C14
CURRENT APPLICATION NUMBER: US/09/735,705
CURRENT FILING DATE: 2000-112-12
NUMBER OF SEQ ID NOS: 419
SOFTWARE: FastSEQ for Windows Version 3.0
LENGTH: 448
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               Sequence 340, Application US/09735705
Patent No. US20020052329A1
GENERAL INFORMATION:
                                                                                                         Kalos, Michael D.
Bangur, Chaitanya S.
Hosken, Nancy
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Best Local Similarity 100.(
Matches 448; Conservative
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Fan, Ligun
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Li, Samuel X.
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US-09-735-705-340
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APPLICANT: Wang, Tongtong
APPLICANT: Wang, Tongtong
APPLICANT: Wang, Tongtong
APPLICANT: Fanger, Gary R.
APPLICANT: Vedvick, Thomas S.
APPLICANT: Carter, Darrick
APPLICANT: Carter, Darrick
APPLICANT: Genter, Darrick
APPLICANT: Henderson, Robert A.
APPLICANT: Penger, Neill
APPLICANT: Peckham, David W.
APPLICANT: Peckham, David W.
APPLICANT: Penger, Neill
APPLICANT: Penger, Neill
APPLICANT: Penger, Neill
APPLICANT: Penger, Neill
APPLICANT: Penger, Sechham, David W.
APPLICANT: Penger, Sechham, David W.
APPLICANT: Penger, Neill
APPLICANT: Penger, Neill
APPLICANT: Sechham, David W.
APPLICANT: Sechham, 
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Patent No. US20020147143A1
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Best Local Similarity
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US-09-850-716A-340
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; ORGANISM: HOMO
US-09-850-716A-340
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RESULT 6
US-09-897-778-344
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LENGTH: 516
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                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 516;
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APPLICANT: Kalos, Michael D.
APPLICANT: McNeill, Patricia D.
APPLICANT: Reteill, Patricia D.
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY
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Patent No. US20020115139A1
               Sequence 344, Application US/09735705
Patent No. US20020052329A1
                                                                                                                                                                                               Henderson, Robert A. McNeill, Patricia D.
                                                                                      Kalos, Michael D.
Bangur, Chaitanya S
Hosken, Nancy
Fanger, Gary R.
                                                                                                                                                 Li, Samuel X.
Wang, Aijun
Skeiky, Yasir A.W.
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Best Local Similarity 100.
Matches 410; Conservative
                                                             Wang, Tongtong
Fan, Ligun
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                                          GENERAL INFORMATION:
APPLICANT: Wang, T
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US-09-850-716A-344
US-09-735-705-344
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APPLICANT: Wang, Tongtong
APPLICANT: Fanger, Gary R.
APPLICANT: Fanger, Gary R.
APPLICANT: Carter, Darrick
APPLICANT: Carter, Darrick
APPLICANT: Watenabe, Yoshihiro
APPLICANT: Henderson, Robert A.
APPLICANT: Henderson, Robert A.
APPLICANT: Fanger, Neil
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY
TITLE OF INVENTION: AND DIAGNOSIS OF LUNG CANCER
FILE REFERENCE: 210121.455C16
CURREWY APPLICANTON NUMBER: US/09/897,778
CURREWY ETLING DATE: 2001-06-28
NUMBER OF SEQ ID NOS: 467
                                                                                                                                                                                                                                                                                           Length 516;
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FILE REFERENCE: 210121.455C15
CURRENT APPLICATION NUMBER: US/09/850,716A
CURRENT FILING DATE: 2001-05-07
NUMBER OF SEQ ID NOS: 440
SOFTWARE: FastSED for Windows Version 3.0
SEQ ID NO 344
LENGTH.: 516
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100.0%; Pred. No. v.
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                                                                                                                                                                                                                                                                                        Query Match 91.5
Best Local Similarity 100.
Matches 410; Conservative
                                                                                                                                                                                                                             ; ORGANISM: Homo sapiens US-09-850-716A-344
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                                             SPSPAIPSNTDYPGPHSFDVSFQQSSTAKSATWTYSTELKKLYCQIAKTCPIQIKVWTPP 180
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US-09-60-716A-339
US-09-60-716A-339
US-09-60-716A-339
Sequence 339, Application US/09850716A
Patent No. US20020115139A1
GENERAL INFORMATION:
APPLICANT: Relos, Michael D.
APPLICANT: Retter, Marc W.
TITLE OF INVERTION: COMPOSITIONS AND METHODS FOR THE THERAPY
TITLE OF INVERTION: AND DIAGNOSIS OF LUNG CANCER
FILE REPREMENCE: 201021.455015
CURRENT APPLICATION NUMBER: US/09/850,716A
NUMBER OF SEQ ID NOS: 440
SOUTHWARE: FREQ ID NOS: 440
SOFTWARE: FREQ ID NOS: 440
SEQ ID NO 339
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100.0%; Pred. No. 0;
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Best Local Similarity 100.
Matches 410; Conservative
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APPLICANT: Bangur, Chaltanya S.
APPLICANT: Bangur, Chaltanya S.
APPLICANT: Hosken, Nancy
APPLICANT: Enger, Gary R.
APPLICANT: Li, Samuel X.
APPLICANT: Skelky, Mang, Aljun
APPLICANT: Skelky, Robert A.
APPLICANT: Mcnell, Patricia D.
APPLICANT: Fanger, Mclil, Patricia D.
APPLICANT: Fanger, Mclil, Patricia D.
APPLICANT: Mcnell, Patricia D.
APPLICANT: ComPOSITIONS AND METHODS FOR THE TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE FILE REFERENCE: 210121.4555214
CURRENT APPLICANTON NUMBER: US/09/735,705
CURRENT APPLICANTON NUMBER: US/09/735,705
NUMBER OF SEQ ID NOS: 419
SOFTWARE FastSEQ for Mindows Version 3.0
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  100.0%; Pred. No. 0; ive 0; Mismatches
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Patent No. US20020052329A1
GENERAL INFORMATION:
Best Local Similarity 100.
Matches 410; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Wang, Tongtong
Fan, Liqun
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ORGANISM: Homo saplens
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Samuel X.
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US-09-735-705-342
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US-09-850-716A-342
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LENGTH: 680
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PEPLICANT: Fanger, Neil
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR I
TITLE OF INVENTION: AND DIAGNOSIS OF LUNG CANCER
FILE REFERENCE: 210121.455C16
CURRENT APPLICATION NUMBER: US/09/897,778
CURRENT FILING DATE: 2001-06-28
NUMBER OF SEQ ID NOS: 467
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                                                                          Sequence 339, Application US/09897778
Patent No. US20020147143A1
GENERAL INFORMATION:
APPLICANT: Wang, Tongtong
APPLICANT: Wang, Tongtong
APPLICANT: Paneris, Margarita
APPLICANT: Paneris, Gary R.
APPLICANT: Carter, Darrick
APPLICANT: Wathanabe, Yoshihiro
APPLICANT: Wathanabe, Yoshihiro
APPLICANT: Henderson, Robert A.
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Patent No. US20020052329A1
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Fan, Lidun
Kalos, Michael D.
Bangur, Chaitanya S.
Hosken, Nancy
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Best Local Similarity
Matches 410; Conserv
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APPLICANT: Wang, Tor
APPLICANT: Fan, Liq
APPLICANT: Kalos, M
APPLICANT: Bangur, O
APPLICANT: Hosken, N
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                                                             US-09-897-778-339
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APPLICANT: Kalos, Michael D.
APPLICANT: Reler, Marc W.
ITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY
TITLE OF INVENTION: AND DIAGNOSIS OF LUNG CANCER
FILE REFERENCE: 210121.455C15
CURRENT APPLICATION NUMBER: US/09/850,716A
CURRENT FILING DATE: 2001-05-07
NUMBER OF SEQ ID NOS: 440
SOFTWARE: FastSEQ for Windows Version 3.0
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APPLICANT: Henderson, Robert A.
APPLICANT: Henderson, Robert A.
APPLICANT: Fanger, Neill, Particia D.
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE
TITLE OF INVENTION: AND DIAGNOSIS OF LUNG CANCER
FILE REFERENCE: 210121.455C14
CURRENT APPLICATION NUMBER: US/09/735,705
CURRENT FILIG DATE: 2000-12-12
NUMBER OF SEQ ID NOS: 419
SOFTWARE: FastSFn f.
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APPLICANT: Fan, Liqun
APPLICANT: Fan, Liqun
APPLICANT: Bangur, Chaltanya S.
APPLICANT: Bangur, Chaltanya S.
APPLICANT: Hosken, Nancy
APPLICANT: Li, Samuel X.
APPLICANT: Li, Samuel X.
APPLICANT: Skeiky, Yasir A.W.
APPLICANT: Henderson, Robert A.
APPLICANT: Henderson, Robert A.
APPLICANT: Henderson, Robert A.
APPLICANT: Panger, Mail
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE
TITLE OF INVENTION: AND DIAGNOSIS OF LUNG CANCER
CURRENT APPLICATION NUMBER: USON CONFOSITION AND INGENOSIS OF LUNG SEO ID NOS: 419
NUMBER OF SEO ID NOS: 419
SOFTWARE: FastSEQ for Windows Version 3.0
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Best Local Similarity 100.0%; Pred. No. 4.9e-311;
Matches 341; Conservative 0; Mismatches 0;
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                                                                                                                                                                                                                                                                                                          Sequence 343, Application US/09735705 Patent No. US20020052329A1 GENERAL INFORMATION:
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ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                              US-09-735-705-343
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APPLICANT: Mannerakis, Margarita
APPLICANT: Fanger, Gary R.
APPLICANT: Fanger, Thomas S.
APPLICANT: Garter, Darrick
APPLICANT: Watanabe, Yoshihiro
APPLICANT: Fanger, Neil
APPLICANT: Fanger, Neil
TITLE OF INVENTION: AND DIAGNOSIS OF LUNG CANCER
TITLE OF INVENTION: AND DIAGNOSIS OF LUNG CANCER
FILE REFERENCE: 210121.455C16
CURRENT APPLICATION NUMBER: US/09/897,778
NUMBER OF SEQ ID NOS: 467
SOFTWARE: FastSEQ for Windows Version 4.0
LEMOTH: 680
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                Length 680;
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               DB 10;
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91.5%; bcc.
100.0%; Pred. No. v.
... 0; Mismatches
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91.5%; Score 410; DB
Best Local Similarity 100.0%; Pred. No. 0;
Matches 410; Conservative 0; Mismatches
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                al Similarity 100.
410; Conservative
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; ORGANISM: Homo saplens
US-09-897-778-342
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GENERAL INFORMATION:
APPLICANT: Wang, Ton
APPLICANT: Fanger,
APPLICANT: VedVick,
APPLICANT: Carter,
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US-09-897-778-342
  Query Match
Best Local S
Matches 410
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                                                                                                                                                               Sequence 343, Application US/09850716A

Patent No. US20020115139A1

GENERAL INFORMATION:

APPLICANT: McNeill, Patricia D.

APPLICANT: Retter, Marc W.

TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY

TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY

TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY

TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY

TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY

CURRENT APPLICATION NUMBER: US/09/850,716A

CURRENT APPLICATION NUMBER: US/09/850,716A

NUMBER OF SEQ ID NOS: 440

SOFTWARE: FastSEQ for Windows Version 3.0
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APPLICANT: Marnerakis, Margarita
APPLICANT: Fanger, Gary R.
APPLICANT: Vedvick, Thomas S.
APPLICANT: Carter, Darrick
APPLICANT: Watanabe, Yoshihiro
APPLICANT: Henderson, Robert A.
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APPLICANT: Vedvick, J
APPLICANT: Carter, DE
APPLICANT: Watanabe,
APPLICANT: Henderson,
APPLICANT: Peckham, I
APPLICANT: Fanger, NE
APPLICANT: Fanger, NE
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US-09-850-716A-343
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Pred. No. 4.9e-311;
                                                                                                                                                                                                                        Mismatches
CURRENT APPLICATION NUMBER: US/09/897,778
UNDRENT FILING DATE: 2001-06-28
NUMBER OF SEQ ID NOS: 467
SOFTWARE: FASESEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        completed: June 24, 2003, 22:24:22
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Best Local Similarity
Matches 341; Conserv
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OM nucleic - nuclei	OM nucleic - nucleic search, using sw model	
Run on: Jun	June 28, 2003, 07:58:28 ; Search time 3502 Seconds (without alignments) 13022.984 Million cell updates/sec	
Title: US-09 Perfect score: 2816 Sequence: 1 tcg	US-09-670-568B-2 2816 1 tcgttgatatcaaagacagtgcatcttggtttaaaagaaa 2816	
Scoring table: OLI Gap	OLIGO_NUC Gapop 60.0 , Gapext 60.0	
Searched: 161	16154066 segs, 8097743376 residues	
Word size : 0		
Total number of hit	Total number of hits satisfying chosen parameters: 32308132	
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and is delived by analysis of the total score distribution.		Description	BM477989 AGENCOURT	AW368384 PM2-HT019	AL698768 DKFZp686H	AL698769 DKFZp686H	AW368378 PM2-HT019	AW368381 PM2-HT019	
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/organism="Homo sapiens"

/db_xref="taxon:9606"

/clonelib="Hr0190"

/de_stage="Adult"

/de_stage="Adult"

/site_1: Smal: A min1-library was made by cloning products

Site_2: Smal: A min1-library was made by cloning products

derived from ORESTES PCR (U.S. Letters Patent application

No. 196,716 - Ludwig Institute for Cancer Research)

profiles into the pUC 18 vector. Reverse transcription of

tissue mRNA and cubrA amplification were performed under

low stringency conditions."
                                                                                                Tel: +55-11-2704922
Fax: +55-11-2707001
Email: asimpson@ludwig.org.br
This sequence was derived from the FAPESP/LICR Human Cancer Genome
Project. This entry can be seen in the following URL
(http://www.ludwig.org.br/scripts/gethtml2.pl?tl=PM2&t2=PM2-HT0190-
Seq primer: puc 18 forward
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DKF2p686H1410_r1 686 (synonym: hlcc3) Homo sapiens cDNAFZp686H1410 5, mRNA sequence.
                               Contact: Simpson A.J.G.
Laboratory of Cancer Genetics
Ludwig Institute for Cancer Research
Rua Prof. Antonio Prudente 109, 4 andar, 01509-010,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 582;
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llarity 99.8%; Pred. No. 1.4e-184;
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Site_2: Sal; cloned unidirectionally; oligo-dT primed.
*NotE = Sal; cloned unidirectionally; oligo-dT primed.
*NotE = Sal; cloned and constructed by Life Technologies.
NotE: this is a NIH_MGC Library."

a 303 c 227 g 235 t l others
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HCGP http://www.ludwig.org.br/ORESTES.
The FAPESP/LICR Human Cancer Genome Project
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Pred. No. 1e-276;
0; Mismatches 0; Indels 0
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/organism="Homo sapiens"
               /db_xref="taxon:9606"
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100.0%; Pred
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hes 582; Conservative
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Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                             Am Klopferspitz 18a D-82152 Martinsried, Germany This is the 5' sequence of the clone insert Clone from S. Wiemann, Molecular Genome Analysis, German Cancer Research Center (DKFZ); Email s.wiemann@dkfz- heidelberg.de; sequenced by AGOWA (Berlin/Germany) within the CDNA sequencing consortium of the German Genome Project.

No sl sequence available.
This clone (DKFZp686H1810) is available at the RZPD in Berlin. Please contact the RZPD: Ressourcenzentrum, Heubnerweg 6, 14059 Berlin-Charlottenburg, GERWANY; Email: clone@tzpd.de.
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DKFZp686H1810_r1 686 (synonym: hlcc3) Homo sapiens cDNA clone
DKFZp686H1810 5', mRNA sequence.
AL698769
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/clone="DKFZp686H1810"
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/dev_ztaqe="adult"
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Best. Local Similarity 100.49
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1 (bases I to 563)
Wambutt,R., Heubner,D., Mewes,W., Weil,B. and Wiemann,S.
EST (Wambutt,R., Heubner,D., Mewes,H.W., Weil,B. and Wiemann,S.)
Unpublished (1999)
                                                                                                                                                                                                                  Am Klopferspitz 18a D-82152 Martinsried, Germany
This is the 5' sequence of the clone insert
Clone from S. Wiemann, Molecular Genome Analysis, German Cancer
Research Center (DKEZ); Email S. Wiemann@dkfz- heidelberg.de;
sequenced by AGGWA (Berlin/Germany) within the cDNA sequencing
consortium of the German Genome Project.
No s1 sequence available.
This clone (DKEXp686H1410) is available at the RZPD in Berlin.
Please contact the RZPD: Ressourcenzentrum, Heubnerweg 6, 14059
Berlin-Charlottenburg, GERNANN; Email: clone@tzpd.de.
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/dev_stage="adult"
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114 bp mRNA linear EST 04-FEB-2000 101 HT0190 HOMO Sapiens CDNA, mRNA Sequence. Tradta; Craniata; Vertebrata; Euteleostomi; mates; Catarrhini; Hominidae; Homo. Org.br/ORESTES. ancer Genome Project netics netics netics for the PAPESP/LICR Human Cancer Genome be seen in the following URL Orgeripte/gethtml2.pl7tl-PM2&t2-PM2-HT0190- Tradt: 20 Op: 514. Indian the FAPESP/LICR Human Cancer Genome be seen in the following URL Orgeripte/gethtml2.pl7tl-PM2&t2-PM2-HT0190- Tradt: 20 Op: 514. Indian the FAPESP/LICR Human Cancer Genome be seen in the following URL Tradt: 20 Op: 514. Indian the FAPESP/LICR Human Cancer Genome be seen in the following URL Indian the Sapient of Cancer Parasaraphlication of Cancer Parasaraphlicati	da da dy	RES AW3 AW3 DEPC DEPC VER KEY SOU O O	COM	BASE C	
AW368378 LOCUGUS LOCUGUS DEFINITION WA368378.1 GI:6873028 REYWORDS EST. WA368378.1 GI:6873028 REYWORDS BST. Homo sapiens EUMARYOTA; Metazoa; Cho Mammalla; Eutheria; Pili Tobases 1 to 514) TILLE COMENT CONTECT: Simpson A.J.G. Laboratory of Cancer Ger Rua Prof. Antonio Pruder COMENT CONTECT: Simpson A.J.G. Laboratory of Cancer Ger Rua Prof. Antonio Pruder BRAZII Tel: +55-11-2707001 Email: asimpson@ludwig.cr This sequence was derive Froject: This entry can OB1099-001-d01613-999-18 FRATURES FRATURES FRATURES CONTECT: This entry can OB1099-001-d01613-1999-18 High quality sequence st Action/Cualif Corraniam Thomas Acte. Simal: Acton Corraniam Thomas Acte. Simal: Acton Corraniam Thomas Acte. Simal: Acton Acton Similarity 99.5%; pre Matches 438; Conservative 0; OV 771 GCTGAGCCGTGAATCAGGGGAN DO STILL SIMAN ACTIVATING SIMAN ACTIVATING SIMAN ACTIVATAGGCGCTGAATCAGGGGAN ACTIVATGAGCGGAATGGCGAATCAGGGGAN ACCAGAAGAAGACGCAATCTCTGGGGGAN ACCAGAAGAAGACGCAATCTCTGGGGAN ACCAGAAGAAGACGCAATCTCTGGGGAN ACCAGAAGAAGACGCAATCTCTGGGGAN ACTIVITIE SIMAN ACTIVITIE SIMAN ACTIVATION	AW368378 11near EST AW368378 1009-001-d01 HT0190 Homo sapiens CDNA, mRNA AW368378 1 GI:6873028 EST. human 1 Homo sapiens CDNA, mRNA AW368378.1 GI:6873028 EST. Homo sapiens EUKaryota; Metazoa; Chordata; Craniata; Vertebrata; Eute. Mammalla; Eutheria; Primates; Catarrhin; Hominidae, Inchina	1 (bases 1 to 514) HCGP http://www.ludwig.org.br/ORESTES. The FAPESP/LICE Human Cancer Genome Project Unpublished (1999) Contact: Simpson A.J.G. Laboratory of Cancer Genetics Ludwig Institute for Cancer Research Brazil El +55-11-2704922 Fax: +55-11-2704922 Fax: +55-11-2704901 Email: asimpson@ludwig.org.br This sequence was derived from the FAPESP/LICR Human Cancer Firis entry can be seen in the following URL (http://www.ludwig.org.br/OS1104104)	Seq primer: pure 18 forward High quality sequence start: 20 High quality sequence stors: 514. ES	**Match** 147 a 113 c 141 g 113 t Local Similarity 99.5%; Score 338; DB 10; Length 514; Local Similarity 99.5%; Pred. No. 7.8e-156; 12 GCGGGCGTGAATTCAACGAGGGACAGATTGCCCCTCCTAGTCATTGATTCGAGTAGA 83	GGGGAACAGCCATGCCCAGTATGTAGAACATCCCATCAGGAAGACAGGGGGGGG

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637 bp mRNA linear EST 04-FEB-2000 PM2-HF0190-081099-001-a07 HT0190 Homo sapiens cDNA, mRNA sequence. AW368375 AW368375.1 GI:6873025
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   GGAGGGATGAACCGCCGTCCAATTTTAATCATTGTTACTCTGGAAACCAGAGATGGGCAA 1026
                                                                            GTCCTGGGCCGACGCTGCTTTGAGGCCCGGATCTGTGCTTGCCCAGGAAGACAGGAAG 1086
                                                                                                                                                                                                                                                                                                                                                                                CTGTTGAAGATCAAAGAGTCCCTGGAACTCATGCAGTACCTTCCTCAGCACACAATTGAA 1326
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Email: asimpson@ludwig.org.br
This sequence was derived from the FAPESP/LICR Human Cancer Genome
This sequence was derived from the FAPESP/LICR Human Cancer Genome
Project. This entry can be seen in the following URL
Project. This entry can be seen in the following URL
(http://www.ludwig.org.br/scripts/gethtmi2.pl?tl-PM2&t2-PM2-HT0190-
081099-001-a07&t2-1999-10-08&t4-1)
Seq primer: puc 18 forward
High quality sequence start: 14
High quality sequence stop: 589.
Location/Qualifiers
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Laboratory of Cancer Genetics
Ludwig Institute for Cancer Research
Rua Prof. Antonio Prudente 109, 4 andar, 01509-010, Sao Paulo-SP,
                       GCGGATGAAGATAGCATCAGAAAGCAGCAAGTTTCGGACAGTACAAAGAACGGTGATGGT
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
I (bases 1 to 67)
HCGP http://www.ludwig.org.br/ORESTES.
The FAPESP/LICR Human Cancer Genome Project
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/db_xref="taxon:9606"
/clone_lib="HT0190"
/dev_stage="Adult"
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/organism="Homo sapiens"
/db_xref='texon:9606"
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/dev_stage="Adult"
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/note='norgan: head_neck; Vector: puc18; Site_l: Smal;
Site_2: Smal; A mini-library was made by cloning products
derived from ORESTES PCR (U.S. Letters Patent application
No. 196,716 - Ludwig Institute for Cancer Research)
profiles into the puc 18 vector. Reverse transcription of
tissue mRNA and cDNA amplification were performed under
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PM2-HT0190-081099-001-C08 HT0190 Homo sapiens CDNA, mRNA sequence.
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This sequence was derived from the FAPESP/LICR Human Cancer Genome
Project. This entry can be seen in the following URL
(http://www.ludwig.org.br/scripts/gethtml2.pl?tl=PM2&t2-PM2-HT0190-
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Sukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 636)
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Laboratory of Cancer Genetics
Ludwig Institute for Cancer Research
Rua Prof. Antonio Prudente 109, 4 andar, 01509-010, Sao Paulo-SP,
                                 CGAAGATCCCCAGATGAACTGTTATACTTACCAGTGAGGGGCCGTGAGACTTATGAA
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The FAPESP/LICR Human Cancer Genome Project
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Pred. No. 7.4e-154;
0; Mismatches 2;
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150 c 155 g 192 t
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High quality sequence stop: 635.
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ilarity 99.5%;
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/clone_lib="HT0322"
/dev_stage="Adult"
/note="Corgan: head_neck; Vector: puc18; Site_l: SmaI;
Site_2: SmaI; A mini-library was made by cloning products
derived from ORESTES PCR (U.S. Letters Patent application
No. 196,716 - Ludwig Institute for Cancer Research)
profiles into the pUC 18 vector. Reverse transcription of
tissue mRNA and CDNA amplification were performed under
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Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostoml;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 498)
MCT-GCAP http://www.ncbi.nlm.nih.gov/ncicgap.
National Cancer Institute, Cancer Genome Anatomy Project (CGAP),
Unpublished (1997)
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                                                                                                                                                                                                                    Gaps
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Email: cgapbs-rémail.nih.gov
This clone is available royalty-free through LLNL; contact the
IMAGE Consortium (info@image.llnl.gov) for further information.
Insert Length: 1013 Std Error: 0.00
Seq primer: -400p from Gibco
High quality sequence stop: 446.
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Pred. No. 4.4e-129;
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This sequence was derived from the FAPESP/LICR Human Cancer Genome
This sequence was derived from the FAPESP/LICR Human Cancer Genome
Project. This entry can be seen in the following URL
201299-135-e02&t3-1909-12-20&t4=1)
Sultp://www.ludwig.org.br/scripts/gethtml2.pl?ti-cMO&t2=CMO-HT0322-SOG primer: puc 18 forward
High quality sequence start: 38
High quality sequence stop: 517.

Location/Qualifiers
Jrce
J. 517

Arref="taxon:9606"

Abo_xref="taxon:9606"
                                                                                                                    GGAGGGATGAACCGCCGTCCAATTTTAATCATTGTTACTCTGGAAACCAGAGATGGGCAA 1026
                                                                                                                                                                             GTCCTGGGCCGACGCTGCTTTGAGGCCCGGATCTGTGCTTGCCCAGGAAGAGACAGGAAG 1086
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                                                                                                                                                                                                                                                                                        AGATCCCCAGATGAAGTGTTATACTTACCAGTGAGGGGCCGTGAGACTTATGAAATG 1266
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CMO-HT0322-201299-135-e02 HT0322 HOMO Sapiens CDNA, MRNA sequence.
AW382125
AW382125.1 GI:6886784
                                                                                                                                                                                                                                                                                                       Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Bomo.
HCGP http://www.ludwig.org.br/ORESTES.
The FARSEP/LICR Human Cancer Genome Froject
Contact: Simpson A.J.G.
Laboratory of Cancer Genetics
Ludwig Institute for Cancer Research
Rua Prof. Antonio Prudente 109, 4 andar, 01509-010, Sao Paulo-SP,
                                                            CAGGITGGCACTGAATTCACGACAGTCITGTACAATTTCATGTGTAACAGCAGTTGTGTT
                                                                                                                                                                                                                                   GCGGATGAAGATAGCATCAGAAAGCAGCAAGTTTCGGACAGTACAAAGAACGGTGATGGT
                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                             1327 ACGTACAGGCAACAGCAACAGCAGCACCAGCACTTACTTCAGAAACA 1376
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 637;
                                         3; Indels
         Score 317; DB 10;
Pred. No. 2e-145;
0; Mismatches 3;
       11.3%;
99.4%;
Query Match 11.3'
Best Local Similarity 99.4'
Matches 467; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Tel: +55-11-2704922
Fax: +55-11-2707001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         human.
                                                                                                                                              534
                                                             907
                                                                                                                    296
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DEFINITION
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TITLE
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AW382125
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us-09-670-568b-2.oli.rst

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/note="Organ: had_neck; Vector: puc18; Site_1: Smal; Site_2: Smal; A mini-library was made by cloning products derived from ORESTES PCR (U.S. Letters Patent application No. 196,716 - Ludwig Institute for Cancer Research) profiles into the pUC 18 vector. Reverse transcription of tissue mRNA and CDNA amplification were performed under
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AGENCORT_6407216 NIH_MGC_85 Homo sapiens cDNA clone IMAGE:5500647 BM455587
                                                                Email: asimpsoneludwig.org.br
This sequence was derived from the FAPESP/LICR Human Cancer Genome
Project. This entry can be seen in the following URL
(http://www.ludwig.org.br.scripts/gethtml2.pl?tl=&t2=PM4-HT0191-281
099-002-c10&t3=1999-10-28&t4=1)
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Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2240 TACTACAAAAAAACTGTTGTTGGCCCCCATAGCAGGTGAACTCATTTGTGCTTTTAAT
217 TACTACAAAAAAACTGTTGTTTGGCCCCCATAGCAGGTGAACTCATTTGTGCTTTTAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       37 GATCATTACCAAAAGTAATCAACTTTGTGGGTGGAGAGTTCTTTGTGAGAACTTGCATTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2180 CACTGTATGTTGGCATCTGTTATGCTAAAGTTTTTCTTGTACATGAAACCCTGGAAGACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2060 GATCATTACCAAAAGTAATCAACTTTGTGGGTGGAGAGTTCTTTGTGAGAACTTGCATTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2120 ITTGTGTCCTCCCTCATGTGTAGGTAGAACATTTCTTAATGCTGTGTACCTGCTCTGC
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1 (bases 1 to 1177)
NIH-MGC http://mgc.ncl.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Contact: Robert Strausberg, Ph.D.
Email: cgapbs r@mail.nih.gov
Tissue Procurement: Lou Straudt
CDNA Library Preparation: Life Technologies, Inc.
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 293;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         9.1%; Score 257; DB 10;
Similarity 100.0%; Pred. No. 1e-115;
77; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                low stringency conditions.
59 c 65 g 92
                                                                                                                                                                                                                                                                         1 .293
/organism="Homo sapiens"
/db_xref="taxon:9606"
/clone_lib="HT0191"
/dev_stage="Adult"
                                                                                                                                                                                 Seq primer: puc 18 forward
High quality sequence start: 47
High quality sequence stop: 293.
Location/Qualifiers
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                       Tel: +55-11-2704922
Fax: +55-11-2707001
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches 257; Conservative
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Best Local
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BM455587
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                                                                                                                                                  /note-"Organ: pooled; Vector: pT7T3D-Pac (Pharmacia) with a modified polylinker; Site_1: Not I; Site_2: Eco RI; Equal amounts of plasmid DNA from three normalized libraries (fetal lung NbHil39W, testis NHT, and B-cell NCI_CGAP_GCBI) were mixed, and so circles were made in vitro. Following HAP purification, this DNA was used as tracer in a subtractive hybridization reaction. The driver was PCR-amplified cDNAs from pools of 5,000 clones made from the same 3 libraries. The pools consisted of I.M.A.G.E. clones 297480-302087, 682632-687239, 726408-728711, and 729096-731399. Subtraction by Bento Soares and M. Fatima Bonaldo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             293 bp mRNA linear EST 21-JUN-2000 PM4-HT0191-281099-002-c10 HT0191 Homo sapiens cDNA, mRNA sequence. BE145042.1 GI:8607766 EST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1 (bases 1 to 293)

Dias Neto,E., Garcia Correa,R., Verjovski-Almeida,S., Briones,M.R., Soldman,G.H., Carvalho,A.F., Matsukuma,A., Bala,G.S., Simpson,D.H., Magal,M.A., deoliveire,P.S., Matsukuma,A., Bala,G.S., Simpson,D.H., Brunstein,A., deoliveire,P.S., Bucher,P., Jongeneel,C.V., O'Hare,M.J., Soares,F., Brentani,R.R., Reis,L.F., de Souza,S.J. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2378 GCCTCTCACAAATCTGTGATTAATTTGCTTAATTAGAGCTTCTATCCCTCAAGCCTAC 2437
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2498 TITTGAGTAAGTGAGATCCAAGCAGACGTGTTAAAATCAGCACTCCTGGACTGGAAATTA 2557
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2438 CTACCATAAAACCAGCCATATTACTGATACTGTTCAGTGCATTTAGCCAGGAGACTTACG 2497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            438 GCCCTCTCACAAAATCTGTGATTAATTTGCTTAATTAGAGCTTCTATCCTCAAGCCTAC 379
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Ludwig Institute for Cancer Research
Rua Prof. Antonio Prudente 109, 4 andar, 01509-010, Sao Paulo-SP,
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Proc. Natl. Acad. Sci. U.S.A. 97 (7), 3491-3496 (2000)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 498;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 9.8%; Score 275; DB 9; Le
Best Local Similarity 100.0%; Pred. No. 1.3e-124;
Matches 275; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2558 AAGATTGAAAGGGTAGACTACTTTTTTTTTA 2592
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/clone_lib="Soares_NFL_T_GBC_S1"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              258 AAGATTGAAAGGGTAGACTTTTCTTTTTTA 224
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                                           'organism="Homo sapiens"
                                                              /db_xref="taxon:9606
Location/Qualifiers
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BE145042
LOCUS
DEFINITION
ACCESSION
VERSION
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ORIGIN
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FEATURES
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/lab_togran: Jymph; Vector: pcwy-SporT6; Jymph; Jymph; Vector: pcwy-SporT6; Jymph; 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; E 1 (bases 1 to 736)

NHH-MGC http://mgc.nci.nih.gov/.

NHH-MGC http://mgc.nci.nih.gov/.

L Onpublished (1999)

Contact: Robert Strausberg, Ph.D.

Email: cgapD3-rémail.nih.gov
Tissue Procurement: James Cleaver, M.D.

CDNA Library Preparation: Life Technologies, Inc.

CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL) DNA
Clone distribution: MGC clone distribution information can be http://image.llnl.gov
Plate: LLAM10691 row: 1 column: 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      102 CCCAGCTCATTTCTCTTGGAAAGAAAGTTATTACCGATCCACCATGTCCCAGAGGACAAA 161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  186 CCCAGCTCATTCTCTTGGAAGAAGTATTACCGATCCACCATGTCCCAGAGCACACA 245
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     246 GACAAATGAATTCCTCAGTCCAGAGGTTTTCCAGCATATCTGGGATTTTCTGGAACAGC 305
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              sapiens cDNA clone IMAGE:4800466 5',
                                                                      þ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GACAAATGAATTCCTCAGTCCAGAGGTTTTCCAGCATATCTGGGATTTTCTGGAACAGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
DNA Sequencing by: Agencourt Bioscience Corporation
Clone distribution: MGC clone distribution information can i
found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
Plate: LLAM12135 row: o column: 16
High quality sequence stop: 524.
Location/Qualifiers
1. 1177
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0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      / Match
Local Similarity 100.0%; Pred. No. 3e-112;
les 250; Conservative 0; Mismatches 0; Indels 0
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BG698692.1 GI:13966211
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/organism="Homo sapiens"
/dx_ref="txxon:9606"
/clone=lib="NoI_CGAP_Skn3"
/dx_host="bnot="hino Ril phage-resistant)"
/dx_host="norgan: skin; vector: pcww.sports; site_1: NotI;
/note="Organ: skin; vector: pcww.sports; site_1: NotI;
/note="Organ: skin; vector: pcww.sports; brimer: oligo dr.
/verage insert size 1.5kb. Library constructed by Life
Technologies: Note: this is a NoI_CGAP Library."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Tel: +55-11-2704922
Fax: +55-11-2707001
Email: asimpson@ludvig.org.br
This sequence was derived from the FAPESP/LICR Human Cancer Genome Project. This entry can be seen in the following URL (http://www.ludvig.org.br/scripts/gethtml2.pl?tl=MR0&t2=MR0-HT0241-Seq primer: puc 18 forward High quality sequence start: 52 High quality sequence stop: 331.

S Location/Oualifiers
1. 565
Colonelia="#"Homo sapiens"

Ab_xref="taxon:966"

Clone_lib="#H0024"

Ade_xstage="Adult"

Anote="Organ: head_neck; Vector: puc18; Site_1: SmaI;
                                                                                                                                                                                                                                                                                                                                           1377 TCTCCTTTCAGCCTGCTTCAGGAATGAGCTTGTGGAGCCCCGGAGAGAAACTCCAAAACA 1436
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MRO-HT0241-101299-003-a05 HT0241 Homo sapiens CDNA, mRNA sequence.
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
HCGP http://www.ludwig.org.br/ORESTES.
The FAPESP/LICR Human Cancer Genome Project
Unpublished (1999)
Contact: Simpson A.J.G.
Laboratory of Cancer Genetics
Ludwig Institute for Cancer Research
Rua Prof. Antonio Prudente 109, 4 andar, 01509-010, Sao Paulo-SP,
                                                                                                                                                                                                                                                                                                                                                                                                                                     1437 ATCTGACGTCTTCTTTAGACATTCCAAGCCCCCAAACCGATCAGTGTACCCATAGAGCCC
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                                                                                                                                                                                                                                                                          8.3%; Score 233; DB 12; Length 736;
100.0%; Pred. No. 8e-104;
tive 0; Mismatches 0; Indels (
High quality sequence stop: 733.
                       Location/Qualifiers
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Site_2: Smal; A mini-library was made by cloning products derived from ORESTES PCR (U.S. Letters Patent application No. 196,716 - Ludwig Institute for Cancer Research) profiles into the pUC 18 vector. Reverse transcription of tissue mRNA and cDNA amplification were performed under low stringency conditions.

126 c 140 g 121 t
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                                                                                                                                                                                                                                                                                                                                                                                                                                                  1016 GAGATGGGCAAGTCCTGGGCCGACGCTGTTTGAGGCCCGGATCTGTGCTTGCCCAGGAA 1075
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Email: asimpson@ludwig.org.br
This sequence was derived from the FAPESP/LICR Human Cancer Genome
Project. This entry can be seen in the following URL
(http://www.ludwig.org.br/scripts/gethtml2.pl?tl-MR0&t2-MR0-HT0241-
091299-004-b02&t3-1999-12-09&t4-1)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            .076 GAGACAGGAAGGCGGATGAAGATAGCATCAGAAAGCAGCAAGTTTCGGACAGTACAAAGA 1135
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AW379296 508 bp mRNA linear EST 04-FEB-200
MRO-HT0241-091299-004-b02 HT0241 Homo sapiens cDNA, mRNA sequence.
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1 (bases 1 to 508)

HCGP http://www.ludwig.org.br/ORESTES.

The FAPESP/LICR Human Cancer Genome Project

Onpublished (1999)
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Laboratory of Cancer Genetics
Ludwig Institute for Cancer Research
Rua Prof. Antonio Prudente 109, 4 andar, 01509-010, Sao Paulo-SP,
                                                                                                                                                                                                                                                                                                 Gaps
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                                                                                                                                                                                                                                             Length 565;
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/dev_stage="Adult"
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High quality sequence stop: 438.
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                                                                                                                                218 CAAGITICGGACAGTACAAAGAACGGIGAIGGIACGAAGCGCCCGTITCGICAGAACACA 277
                                                                                                                                                                            1114 CAAGTTTCGGACAGTACAAAGAACGGTGATGGTACGAAGCGCCCGTTTCGTCAGAACACA
                                                                          Gaps
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                                           Length 508;
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                                                                          Indels
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                                           7.9%; Score 223; DB 10;
100.0%; Pred. No. 7.2e-99;
iive 0; Mismatches 0;
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p40 coding s lung cancer-p53 homologu lung cancer-lung cancer-lung cancer-p53 homologu lung tumor a

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Human; p51; p53 related gene; cell proliferation; regulation; cancer; tumour suppression; diagnosis; ss.
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AAZ24648
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AAI85883
AAA29172
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145. 1491
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 99WO-JP01512
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AAZ25770;
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 iung cancer-
gene #2 used
p53 homologu
cell regulat
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10551.792 Million cell updates/sec
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         GenCore version 5.1.6
Copyright (c) 1993 - 2003 Compugen Ltd.
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    nucleic search, using sw model

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                                                                                               The present sequence represents a human p51 gene, which is related to p53 and has cell proliferation regulation and tumour suppression activity. The p51 gene can be used in the investigation, diagnosis and treatment of diseases such as cancer, with which the p53 family cell proliferation regulation is associated. The p51 protein may be used for secreting potential agonists and antagonists of its regulatory function,
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  Obinata
                                            New p53 related human gene
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         This invention describes a novel isolated polypeptide (I) which comprising an immunogenic portion of a lung tumor protein or variant (P2) which have cytostatic activity. The polypeptides and polyncleotides are used in compositions and vaccines to inhibit the development of cancer, especially lung cancer, in a patient. Methods described in the invention can be used to monitor the progression of a cancer by carrying out the detection at subsequent time points and comparing the results from the different time points. CD4+ and/or CD8+ T-Cells isolated from a patient are treated with P2, polynucleotides encoding P2 or antigen presenting cells expressing P2 and then administered to the patient to inhibit
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                                                                                     treatment; human; tumor; 1mmunogen1c; cytostatic;
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                                            p63 isoform
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                                            cancer-associated cDNA
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99US-0466396.
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er, comprises a transcription activating region and
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Oy Dp	1741 GAACCACTGTGTTTGTCTGTGAGCTTTCTGTTGTTTCCTGGGAGGGA	RESULT ABL492	JT 4 1248 ABL49248 standard; cDNA; 2816 BP.
Qy Db	1801 GAAAGGGCATTAAGATGTTTATTGGAACCCTTTTCTGTTTTTTGTTTTTTTT	E X Y X	ABL49248; 01-MAY-2002 (first entry)
Oy Dp	1861 AATTCACAGGGAAGCTTTTGAGCAGGTCTCAAACTTAAGATGTCTTTTTAAGAAAAGGAG 1920 	XX D XX	553 homologue isoform, p63 (L530S) cDNA sequence SEQ ID NO
Oy Dp	CAGA 198	M X X X	namen, tuny cumoui, tung cancer; cytostatic; immunostimulant; vaccine; immune response; ss. Homo sapiens.
oy Dp	AGTG 20 AGTG 20	N X X X	WO200200174-A2. 03-JAN-2002.
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                                                                                                                                                        The present invention describes human lung tumour proteins. Human lung tumour proteins and polynuclectides have cytostatic and immunostimulant activities, and can be used in vaccine production. Compositions comprising the lung tumour proteins, polynuclectides, antibodies, fusion proteins, T cell populations, or antigen presenting cells that express the lung tumour proteins are useful for treating user cancer or stimulating an immune response. ABI48959 to ABI49300 and ABB74946 to ABB75070 represent sequences used in the exemplification of the present
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Retter MW, Marnerakis M
Watanabe Y, Peckham DW;
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llarity 100.0%; Pred. No. 0;
Conservative 0; Mismatches
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2000US-0735705.
2001US-0850716.
                                              Skeiky
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Carter D,
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P-PSDB; ABB74991.
                            CORIXA CORP
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Matches 2816; Conserv
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07-MAY-2001;
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P-PSDB; AAY45247.
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                                              07-JAN-2000
                                                                                  Homo sapiens
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             New p53 related human gene p51, useful for diagnosis, investigation and treatment of cancers and screening for potential cell proliferation
2761 TTGTGGATGTGTGATTTTAATTTTCAATAAACTTTTGCATCTTGGTTTAAAAGAAA 2816
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Best Local Similarity 100.0%; Pred. No. 0;
Matches 1376; Conservative 0; Mismatches 0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The present invention describes human lung tumour proteins. Human lung actimucar proteins and polynuclectides have cytostatic and immunostimulant activities, and can be used in vaccine production. Compositions comprising the lung tumour proteins, polynuclectides, antibodies, fusion proteins, T cell populations, or antigen presenting cells that express the lung tumour proteins are useful for treating lung cancer or stimulating an immune response. ABL48959 to ABL49300 and ABB74946 to ABB75070 represent sequences used in the exemplification of the present
                                                                                                                                                                                                  tumour; lung cancer; cytostatic; immunostimulant; vaccine;
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Retter MW, Marnerakis M,
Watanabe Y, Peckham DW;
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2000US-0643597.
2000US-0662786.
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2000US-0735705.
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AAACGAAGATCCCCAGATGATGAACTGTTATACTTACCAGTGAGGGGCCGTGAGACTTAT 1260 The present invention concerns the discovery of a new family of cell regulatory proteins (CRPs) termed the p63 family of proteins, which demonstrate certain sequence identity to known tumour suppressor proteins p53 and p73. It has been observed that the intron exon organisation is conserved between p73 and p53, and from known exon and intron sizes for these 2 genes, it was possible to identify new members of this gene family using a PCR-based strategy of amplifying 2 exons in a conserved domain and their intervening intron. The human p53 gene was localised to chromosomal position 3427-29. At least 6 different isotypes exist. Splice variants differing at the C-terminus have been designated as alpha, beta and gamma forms, while p63 members differing in the N-terminus are and this base represents a nucleotide missing from the sequence given in the specification. It is included to maintain the nucleotide numbering given in the specification for this sequence. Human cell regulatory protein p63, isoform huTAp63 gamma, cDNA. New isolated p63 cell regulatory protein for, e.g. treatment of Cell regulatory protein; p63; huTAp63 gamma; TAp63 gamma; cancer; tumour suppressor; cell cycle control; apoptosis; cell proliferation; cell differentiation; therapy; ss. Location/Qualifiers 1254 AAX58574 standard; cDNA; 1347 BP Claim 1; Fig 11; 161pp; English. 98US-0087216. 97US-0062076. 98WO-US21992. 16-AUG-1999 (first entry) (HARD) HARVARD COLLEGE. /*tag= /note= WPI; 1999-277595/23. P-PSDB; AAY05955. Yang A; Key misc_difference Homo sapiens W09919357-A2. 02-OCT-1998; 29-MAY-1998; 15-OCT-1997; 22-APR-1999. 1141 1201 AAX58574; McKeon F, tumours RESULT ŏ g δ 셤 οy Q

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          transactivation domain. The present sequence represents a cDNA close encoding human Tap63 gamma. p63 was detected in a variety of human and mouse tissue. It demonstrates remarkably divergent a activities, such as the ability to transactivate p53 reporter genes and induce apoptosis. Cessation or down-regulation of p63 expression may play a critical role in the process of cervical squamous differentiation, both benign and neoplastic. DeltaN isotopes of p63 act as dominant negatives towards transactivation by p53 and p63. Cachexia) and neuronal differentiation and related degenerative disorders. p63 polypeptides (see AANO5953-64), polynucleotides (see AAN55572-83) and anti-p63 antibodies of the invention can be used to identify compounds useful for treating disorders involving such processes, in detection and diagnosis, and in the production of
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Pred. No. 0;
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Matches 1346; Conservative
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This invention describes a novel KET-encoding nucleic acid (I) and its fragments, variants and mutants which has anticancer activity. (I) encodes a protein, (II), involved in control of the cell cycle and apoptosis, i.e. (II) is a tumor suppressor protein which belongs to the coll family. (I), and the polypeptide (II) encoded by it, are used (a) to detect (I) in biological samples, specifically anglogenic tumor tissue, including (I) sequences that have a homozygotic deletion and (b) to detect presence or absence of human chromosome 3427 or murine chromosome 16, or their fragments, by hybridization. Also, (I) is used as a tumor purpressor, particularly in tumors where an alteration in the wild-type (B) allele has not been identified. (I) and (II) may also be used for development of specific cytotoxic agents and for predicting the risk of developing cancer. This sequence represents the human KET cDNA sequence
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                                Claim 3; Page 23-26; 28pp; German.
   KET-encoding nucleic acid and
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       treatment; human; tumor; immunogenic; cytostatic;
                             TGTGCTGGTACCTTATGAGCCACCCCAGGTTGGCACTGAATTCACGACAGTCTTGTACAA
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                                                                                                                                                                                                                                                                                                                                                              Human lung cancer-associated cDNA p63 isoform 5.
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                                                                                                                                                                                                                                                                                                                   AAC66031 standard; cDNA; 4849
                                                                                                                                                                                                                                                                 CITACTICAGAAACA 1376
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99US-0466396.
99US-0476496.
2000US-0480884.
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                                                                                                                                                                                                                                                                                                                                                                              therapy;
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17-DEC-1999;
30-DEC-1999;
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22-FEB-2000;
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2000US-0630940.
2000US-0643597.
2000US-0662786.
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2000US-0735705.
2001US-0850716.
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02-AUG-2000;
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15-SEP-2000;
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                                                                                          This invention describes a novel isolated polypeptide (I) which comprising an immunogenic portion of a lung tumor protein or variant (P2) which have cytostatic activity. The polypeptides and polynocleotides are used in compositions and vaccines to inhibit the development of cancer, especially lung cancer, in a patient. Methods described in the invention can be used to monitor the progression of a cancer by carrying out the detection at subsequent time points and comparing the results from the different time points. CD4+ and/or CD8+ T-Cells isolated from a patient are treated with P2, polynucleotides encoding P2 or antigen presenting calls expressing P2 and then administered to the patient to inhibit
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                                 Isolated polypeptide comprising an immunogenic portion of a protein is used for detecting and monitoring progression of
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     WPI; 2000-628399/60.
P-PSDB; AAB11361.
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                                                         TGTGCTGGTACCTTATGAGCCACCCCAGGTTGGCACTGAATTCACGACAGTCTTGTACAA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  regulatory protein; p63; huTAp63 beta; TAp63 beta; hu
er; tumour suppressor; cell cycle control; apoptosis;
proliferation; cell differentiation; therapy; ss.
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97US-0062076.
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                                                                                                                         The present invention describes human lung tumour proteins. Human lung tumour proteins and polynucleotides have cytostatic and immunostimulant activities, and can be used in vaccine production. Compositions compositions compositions the lung tumour proteins, polynucleotides, antibodies, express the lung tumour proteins, or antigen presenting cells that express the lung tumour proteins are useful for treathing lung cancer or stimulating an immune response. ABI48959 to ABI49300 and ABB74946 to ABB7700 represent sequences used in the exemplification of the present
                                                                                                                                                                                                                                                                                    CCCAGCTCATTTCTCTTGGAAAGATATTACCGATCCACCATGTCCAGAGCACACA
                                                                                                                                                                                                                                                                                                                          useful for treating
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              RA;
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                                                                                                                                                                                                                                                  24; Length 4849;
                        Fanger GR;
             Henderson
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                                                                                                                                                                                                                                                                      Indels
            SX, Kalos MD, H
Marnerakis M,
, Peckham DW;
                                                                              ides encoding lung tumor polypeptides, or stimulating an immune response -
                                                                                                                                                                                                                                                                     ó;
                                                                                                                                                                                                                                               45.3%; Score 1275; DB 100.0%; Pred. No. 0; Live 0; Mismatches
                                                                                                         Example 2; Page 317-318; 374pp; English.
            SX,
            Y YAW, Li SX,
Retter MW, Ma
Watanabe Y, F
           Skeiky
                                                                                                                                                                                                                                                       st Local Similarity 100.
tches 1275; Conservative
                    McNeill PD, Fanger N,
Vedvick TS, Carter D,
                                               2002-090513/12
                                                           P-PSDB; ABB74993
                                                                           Polynucleotides
           Wang
                   PD,
                                                                                        cancer
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         Wang T,
McNeill
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                                                               721 ATCACAGGAAGACAGAGTGTGCTGGTACCTTATGAGCCACCCAGGTTGGCACTGAATTC
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                                                                                                                             CCTCAGGGAGCTGTTATCCGCGCCATGCCTGTCTACAAAAAAGCTGAGCACGTCACGGAG
                                                                                                                                                                                                                 GTGGTGAAGCGGTGCCCCAACCATGAGCTGAGCCGTGAATTCAACGAGGGACAGATTGCC
                                                                                                                                                                                                                                                                                                CCTCCTAGTCATTTGATTCGAGTAGAGGGGAACAGCCATGCCCAGTATGTAGAAGATCCC
                                                                                                                                                                                                                                                                                                                                                                                  ATCACAGGAAGACAGAGTGTGCTGGTACCTTATGAGCCACCCCAGGTTGGCACTGAATTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     <u> ACGACAGTCTTGTACAATTTCATGTGTAACAGCAGTTGTTGTTGGAGGGATGAACCGCCGT</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           781 ACGACAGTCTTGTACAATTTCATGTGTAACAGCAGTTGTGTTGGAGGGATGAACCGCCGT
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                                                                                                                                                          The present invention concerns the discovery of a new family of cell regulatory proteins (CRPs) termed the p63 family of proteins, which demonstrate certain sequence identify to known tumour suppressor proteins p53 and p73. It has been observed that the intron exon organisation is conserved between p73 and p53, and from cknown exon and intron sizes for these 2 genes, it was possible to choose the conserved domain and their intervening intron. The human p53 gene was localised to chromosomal position of aq27-29. At least 6 different isotypes exist. Splice variants of gamma forms, while p63 members differing in the N-terminus are designated as deltaN and TA forms, where the deltaN form lacks the transactivation domain. The present sequence represents a cDNA clone encoding human TAp63 beta. p63 was detected in a variety of human and mouse tissue. It demonstrates remarkably divergent activities, such as the ability to transactivate p53 reporter genes and induce apoptosis. Cessation or down-regulation of p63 expression may play a critical role in the process of cervical squamous differentiation, both benign and neoplastic. DeltaN isotopes of p63 act as dominant negatives towards transactivation by p53 and p63. Cachexia) and neuronal differentiation and related degenerative disorders. p63 polypeptides (see AAX58512-83) and anti-p63 autibodies of the invention and related degenerative concerns, and an euronal differentiation and related degenerative disorders. p63 polypeptides (see AAX58512-83) and anti-p63 autibodies of the invention of the processes, in detection and diagnosis, and in the production of transactive and in the production of transactive and in the production of transactive and in the production of
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                                                             New isolated p63 cell regulatory protein for, e.g. treatment of
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                                                                                                                           Claim 1; Fig 10; 161pp; English
  1999-277595/23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              transgenic animals
WPI; 1999-277595
P-PSDB; AAY05954
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                                                                                                                                                                                                                                                                                                                                                                                            vaccine;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                P63 (L530S) cDNA sequence SEQ ID NO:337,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                tumour; lung cancer; cytostatic; immunostimulant;
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100.0%; Pred. No. 0;
tive 0; Mismatches
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                                   02-APR-1999; 99US-0285479.
17-DEC-1999; 99US-0466396.
30-DEC-1999; 99US-0476496.
10-JAN-2000; 2000US-04180884.
22-FEB-2000; 2000US-0510376.
                    2000WO-US08896
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Matches 1232; Conservative
                                                                                                                          WPI; 2000-628399/60.
P-PSDB; AAB11363.
                                                                                         (CORI-) CORIXA CORP
                                                                                                            Fan L;
                  03-APR-2000;
19-OCT-2000
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                                                                                                                                                                                                                                                                         The present invention describes human lung tumour proteins. Human lung tumour proteins and polynuclectides have cytostatic and immunostimulant activities, and can be used in vaccine production. Compositions comprising the lung tumour proteins, polynuclectides, antibodies, fusion proteins. T cell populations, or antigen presenting cells that express the lung tumour proteins are useful for treating lung cancer or stimulating an immune response. ABU48959 to ABL49300 and ABB74946 to ABB75070 represent sequences used in the exemplification of the present
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    241. ATGGACCAGCAGATTCAGAACGCTCCTCGTCCACCAGTCCCTATAACACAGACCACGG
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                                                                                                                                r YAW, Li SX, Kalos MD,
Retter MW, Marnerakis M,
Watanabe Y, Peckham DW;
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          2000US-0606421.

2000US-0630940.

2000US-064397.

2000US-0662786.

2000US-0685696.

2000US-0685696.
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                                                                                                                                           Fanger N, Carter D,
                                                                                                                                                                             WPI; 2002-090513/12.
P-PSDB; ABB74995.
                                                                                                         (CORI-) CORIXA CORP
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Matches 1232; Conserv
                                                                                                                                  Wang A,
        28-JUN-2000;
02-AUG-2000;
21-AUG-2000;
15-SEP-2000;
09-000;
12-DEC-2000;
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McNeill PD,
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497 646 90442 329 374

US-09-735-705-333

Sequence 333, Application US/09735705 Patent No. US20020052329A1 Kalos, Michael D. Bangur, Chaitanya S Hosken, Nancy Fanger, Gary R. Li, Samuel X. Wang, Aijun Wang, Tongtong Fan, Liqun GENERAL INFORMATION: APPLICANT:
APPLICANT:
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Published_Applications_NA:*

Database

Skeiky, Yasır A.W. Henderson, Robert A. McNeill, Patricia D.

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

/cgn2_6/ptodata/1/pubpna/US60_NEW_PUB.seq:* /cgn2_6/ptodata/1/pubpna/US60_PUBCOMB.seq:*

APPLICANT: MCMeill, Patricia D.
APPLICANT: Fanger, Neil
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY
TITLE OF INVENTION: AND DIAGNOSIS OF LUNG CANCER
FILE REPRENCE: 210121.45514
CURRENT APPLICATION NUMBER: US/09/735,705
CURRENT FILING DATE: 2000-12-12
NUMBER OF SEQ ID NOS: 4190-42 varaion 3.0 EQ ID NOS: 419 FastSEQ for Windows Version 3.0 SOFTWARE: Fe

; ORGANISM: Homo sapiens US-09-735-705-333 : 2816 DNA

Gaps ö DB 10; Length 2816; 0; Indels Query Match 100.0%; Score 2816; Best Local Similarity 100.0%; Pred. No. 0; Matches 2816; Conservative 0; Mismatches

120 9 9 TCGTTGATATCAAAGACAGTTGAAGGAAATGAATTTTGAAACTTCACGGTGTGCCACCCT 1 TCGTTGATATCAAAGACAGTTGAAGGAAATGAATTTTGAAACTTCACGGTGTGCCCCT Н

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ALIGNMENTS

Sequence 9764, Apples Sequence 1284, Apples Sequence 1284, Apples Sequence 1285, Apples

Sequence 333, App Sequence 333, App Sequence 332, App Sequence 332, App Sequence 332, App Sequence 335, App Sequence 335, App Sequence 337, App Sequence 337, App Sequence 337, App Sequence 337, App Sequence 336, App Sequence 334, App Sequence 334, App Sequence 334, App Sequence 334, App Description US-09-735-705-333 US-09-850-716A-333 US-09-897-718-333 US-09-850-716A-332 US-09-850-716A-332 US-09-850-716A-335 US-09-850-716A-335 US-09-850-716A-335 US-09-850-716A-335 US-09-850-716A-337 US-09-850-716A-337 US-09-850-716A-337 US-09-850-716A-337 US-09-850-716A-337 US-09-850-716A-336 US-09-850-716A-336 US-09-735-705-334 US-09-850-716A-334 US-09-897-778-334 US-10-274-874-1 10 Query Match Length DB 2816 2270 2270 2270 4849 4849 4849 11551 11551 2082 2082 2082 2816 2816 1336 1376 11275 11275 11232 11232 11232 1026 975 975 Score Result ٠ چ

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1861 AFTCACAGGAAGCTTTGAGCAGGTCTCAAACTTAAGAAAGGAG 1920	λ a.	GAAAGGGCCATTAAGATGTTTATTGGAACCCTTTTCTGTCTTCTTCTGTTGTTTTTCTAA 	; Patent No. US2002014714341 ; GENERAL INFORMATION: ; APPLICANT: Wang, Tongtong ; APPLICANT: Marnerakis, Marqa
1921 AAAAAGTTGTTATTGTCTGCGATAAGTAGTGACGACCTCAGACCTCAGA 1980 APPLICANT: 1921 AAAAAGTTGTTATTGTCTGTGCATAAGTTGTAGTGACTGAGACACTCAGTCAG	oy Og	AATTCACAGGGAAGCTTTTGAGCAGGTCTCAAACTTAAGATGTCTTTTTAAGAAAAGGAG 	
1981 CCCTTTAATGCTGGTCATGTAATAATATGCAAGTAGGAACGAGGTGTCAAGTG	Oy Dp	AAAAAGTTGTTATTGTCTGTGCATAAGTAAGTTGTAGGTGACTGAGAGGACTCAGTCAG	APPLICANT: APPLICANT: APPLICANT: TITLE OF INV
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2161 GCTGTGTACCTGCCACTGTATGTTATGCTAAAGTTTTTCTTGTA 2220 Guery Match 2161 GCTGTGTACCTGCCACTGTATGTTATGCTAAAGTTTTTCTTGTA 2220 Best Local 2	oy Dp	TTIGTGAGAACTTGCATTATTGTGTCCTCCCCTCATGTGTAGGTAG	TYPE: DNP ORGANISM: S-09-897-778
2221 CATGAAACCCTGGAAGACCTACTACAAAAAACTGTTGTTTGGCCCCCATAGCAGGTGAA 2280 2221 CATGAAACCCTGGAAGACCTACTACAAAAAACTGTTGTTTGGCCCCCATAGCAGGTGAA 2280 2281 CATTTTGTGCTTTTAATAGAAAGCAAATTCACCCCATAGCAGTGAGT 2340 2281 CTCATTTTGTGCTTTTAATAGAAAGCAAATTCACCCAGTAATATTGCCCTTACGTAGT 2340 2281 CTCATTTTGTGCTTTTAATAGAAAGACAAATTCACCCAGTAATATTGCCCTTACGTAGT 2340 2281 CTCATTTTGTGCTTTTAATAGAAAATAGAAATTTGAAGCCCTCCACAAAATTGTGTTACCATAATTGTACTAGTT 2340 2381 TGTTTACCATTATTCAAAGCTCAAAATTGAAGCCCTCCACAAAATCTGTGATT 2400 DD 121 2341 TGTTTACCATTATTCAAAATAGAAATTTGAAAGCCCTCTACAAAATCTGTGATT 2400 DD 121	Oy Db	GCIGTGTACCTGCCTCTGCCACTGTATGTTGGCATCTGTTATGCTAAAGTTTTTCTTGTA 	Query Match 100.0%, Best Local Similarity 100.0%, Matches 2816; Conservative
2281 CTCATTTGTGCTTTTAATAGAAAGCAAATCCACCAGTAATATTGCCCTTACGTAGT 2340 0y 61	Qy Db	CATGAAACCCTGGAAGACCTACTACAAAAAACTGTTGTTTGGCCCCCATAGCAGGTGAA 22 	·
. 2341 TGTTTACCATTATCAAAGCTCAAAATTGAAGCCCTCTCACAAAATCTGTGATT 2400 1111111111111111111111111111111111	Qy Dp	CTCATTTTGTGCTTTTAATAGAAAGACAAATCCACCCCAGTAATATTGCCCTTACGTAGT	
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OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY
OF INVENTION: AND DIAGNOSIS OF LUNG CANCER
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APPLICANT: Warnerakis, Margarita
APPLICANT: Fanger, Gary R.
APPLICANT: Vedvick, Thomas S.
APPLICANT: Carter, Darrick
APPLICANT: Watanabe, Yoshihiro
APPLICANT: Henderson, Robert A.
APPLICANT: Henderson, Robert A.
APPLICANT: Fanger, Neil
APPLICANT: Ranger, Neil
APPLICANT: Canger, Neil
APPLICANT: Compositions and W.
APPLICANT: AND DIAGNOSIS CITILE OF INVENTION: AND DIAGNOSIS C
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Sequence 322, Application US/09850716A
GENERAL INFORMATION:
SEQUENCE APPLICANT: RAIOS, Michael D.
APPLICANT: RAIOS, Marc W.
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE TITLE OF INVENTION: AND DIAGNOSIS OF LUNG CANCER; FILER REFERENCE: 210121,455215
CURRENT APPLICATION NUMBER: US/09/850,716A
SOFTWARE: FatSEQ for Windows Version 3.0
SEQ ID NO 332
LEASTH: 2270
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Best Local Similarity 100.0%; Pred. No. 0;
Matches 1376; Conservative 0; Mismatches
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CORGANISM: HOMO Sapiens
US-09-850-716A-332
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APPLICANT: Bangur, Chaitanya S.
APPLICANT: Bangur, Chaitanya S.
APPLICANT: Hosken, Nancy
APPLICANT: Ranger, Gary R.
APPLICANT: Wang, Aijun
APPLICANT: Wang, Aijun
APPLICANT: Penger, Neilr A.W.
APPLICANT: Penger, Neilr A.W.
APPLICANT: Fanger, Neilr A.W.
APPLICANT: Penger, Neilr A.W.
APPLICANT: Penger, Neilr A.W.
APPLICANT: APPLICANT: MONOSITIONS AND METHODS FOR THE TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE CURRENT APPLICATION NUMBER: US/09/735,705
CURRENT FILING DATE: 2000-12-12
NUMBER OF SEQ ID NOS: 419
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Patent No. US20020052329A1
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100.0%; Pred. No. 0;
tive 0; Mismatches
FILE REFERENCE: 210121.455C16
CURRENT APPLICATION NUMBER: US/09/897,778
CURRENT FILING DATE: 2001-06-28
NUMBER OF SEQ ID NOS: 467
SOFTWARE: FastSEQ for Windows Version 4.0
LENGTH: 2270
                                                                                                   Query Match
Best Local Similarity 100.
Matches 1376; Conservative
                                                                        ; ORGANISM: Homo sapiens
US-09-897-778-332
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1242 GAGGGCCGTGAGATTATGAATGCTGTTGAGATCAAAGATCCTGGAACTCATGCA 1301 Db	RESULT 8 US-09-850-716A-335 US-09-850-716A-335 Sequence 335, Application US/09850716A Patent No. US20020115139A1 GENERAL INFORMATION: APPLICANT: Ralos, Michael D. APPLICANT: Retter, Marc W. TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY TITLE OF INVENTION: AND DIAGNOSIS OF LUNG CANCER TITLE OF INVENTION: AND DIAGNOSIS OF LUNG CANCER TITLE OF INVENTION: AND DIAGNOSIS OF LUNG CURRENT APPLICATION NUMBER: US/09/850,716A CURRENT FILING DATE: 2001-05-07 NUMBER OF SEQ ID NOS: 440 SEQ ID NO 335 LENGTH: 4849 TYPE: DNA ORGANISM: Homo sapiens US-09-850-716A-335	Query Match 45.3%; Score 1275; DB 10; Length 4849; Best Local Similarity 100.0%; Pred. No. 0; 0; Indels 0; Gaps Matches 1275; Conservative 0; Mismatches 0; Indels 0; Gaps 102 CCCAGCTCATTCTCTGGAAAGAAAGTTATACCGATCCACCATGTCCCAGAGCACACA 102 CCCAGCTCATTCTCTGGAAAGAAAGAAAGAAAGAAAGAAA	11 11 11 11 11 11 11 1
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Fatent No. US20020147143a1

GENERAL INFORMATION:

APPLICANT: Wang, Tongtong

APPLICANT: Fanger, Gary R.

APPLICANT: Fanger, Thomas S.

APPLICANT: Fanger, Thomas S.

APPLICANT: Henderson, Robert A.

APPLICANT: Fanger, Nebrt A.

APPLICANT: Fanger, Neil

TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY

TITLE OF INVENTION: COMPOSITION SAND METHODS FOR THE THERAPY

TITLE OF INVENTION: COMPOSITION SAND METHODS FOR THE THERAPY

TITLE OF INVENTION: COMPOSITION SAND METHODS FOR THE THERAPY

CURRENT APPLICATION NUMBER: US/09/897,778

NUMBER OF SEQ ID NOS: 467
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Patent No. US2000052329A1

GENERAL INFORMATION:

APPLICANT: Wang, Tongtong
APPLICANT: Fan, Liqun
APPLICANT: Fan, Liqun
APPLICANT: Bangur, Chaitanya S.
APPLICANT: Hosken, Nancy
APPLICANT: Li, Samuel X.
APPLICANT: Li, Samuel X.
APPLICANT: Mang, Ailun
APPLICANT: Mang, Ailun
APPLICANT: Henderson, Robert A.
APPLICANT: Henderson, Robert A.
APPLICANT: Henderson, Noil
APPLICANT: AFRIGAT.
APPLICANT: AFRIGAT.
COMPOSITIONS AND METHODS
TITLE OF INVENTION: COMPOSITIONS AND LITLE OF INVENTION: AND DIAGNOSIS OF LUNG CAS
FILE REFERENCE: 210121.455C14
CURRENT FILING DATE: 2000.12-12

NUMBER OF SEQ ID NOS: 419

SOFTWARE: FASTSEC for Windows Version 3.0
SEGUTH 1.1551
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43.8%; Score 1232; I
Best Local Similarity 100.0%; Pred. No. 0;
Matches 1232; Conservative 0; Mismatches
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; ORGANISM: Homo sapiens
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1225 CTGTTATACTTACCAGTGAGGGCCGTGAGACTTATGAAATGCTGTTGAAGATCAAAGAG 1284
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           ATCACAGGAAGACAGAGTGTGCTGGTACCTTATGAGCCACCCCAGGTTGGCACTGAATTC
                     ACGACAGTCTTGTACAATTTCATGTGTAACAGCAGTTGTTGGAGGGATGAACCGCGT
                                                                    985 CCAATITIAAICATIGITACICIGGAAACCAGAGAIGGGGAAGICCIGGGCCGACGCIGC
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Sequence 337, Application US/0989778

Setent No. US2002014714341

SEQUENCE 337, Application US/0989778

APPLICANT: Wang, Tongtong

APPLICANT: Marnerakis, Margarita

APPLICANT: Fanger, Gary R.

APPLICANT: Carter, Darick

APPLICANT: Carter, Darick

APPLICANT: Watanabe, Yoshihiro

APPLICANT: Henderson, Robert A.

APPLICANT: Peckham, David W.

APPLICANT: Peckham, David W.

APPLICANT: Penger, Neil

TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE

FILE REFERENCE: 210121.455016

CURRENT APPLICATION NUMBER: US/09/897,778

NUMBER OF EXPLICATION NUMBER: 2001-06-28

SEO ID NO 337

SEO ID NO 337
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100.0%; Pred. No. 0;
tive 0; Mismatches
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Matches 1232; Conservative
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                                          APPLICANT: Michael D.
APPLICANT: McHael D.
APPLICANT: McHeill, Patricia D.
APPLICANT: McHeill, Patricia D.
APPLICANT: McHeill, Patricia D.
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY
TITLE OF INVENTION: AND DIAGNOSIS OF LUNG CANCER
FILE REFERENCE: 210.121, 455C15
CURRENT APPLICATION UNMER: US/09/850,716A
NUMBER OF SEQ ID NOS: 440
SOFTWARE: FastSEQ for Mindows Version 3.0
LENGTH: 1551
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43.8%; Score 1232; D
Best Local Similarity 100.0%; Pred. No. 0;
Matches 1232; Conservative 0; Mismatches
            ; Sequence 337, Application US/09850716A; Patent No. US20020115139A1
; GENERAL INFORMATION:
                                                                                                                                                                                  TYPE: DNA
ORGANISM: HOMO Sapiens
US-09-850-716A-337
09-850-716A-337
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9y 471 CTACCCACACCACACTTCCACCTTCCACCTCTCTCTCTC	QY 1371 GAAACA 1376 Db 1062 GAAACA 1067 RESULT 15 58quence 336, Application US/09897778 Patent No. US20020147143al GENERAL INFORMATION: APPLICANT: Wang, Tongtong APPLICANT: Wang, Tongtong APPLICANT: Marnerakis, Margarita
07 031 GGGGAACACCATGCCCAGTRACTAGAACACCACACACACACACACACACACACACACACA	Query Match 36.4%; Score 1026; DB 10; Length 1386; Best Local Similarity 100.0%; Pred. No. 0; 0.0%; Pred. No. 0; Matches 1026; Conservative 0; Mismatches 0; Indels 0; Gaps 0; 0. Gaps 0; QY 351 GCACAGTACACGAACCTGGGGCTCCTGAACAGCATGGACCAGCAGATTCAGAACGGTC 410 111111111111111111111111111111111111

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APPLICANT: VedVick, Thomas S.
APPLICANT: VedVick, Thomas S.
APPLICANT: Carter, Darrick
APPLICANT: Hatanaba, Robert A.
APPLICANT: Henderson, Robert A.
APPLICANT: Fanger, Neil
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE
TITLE OF INVENTION: AND DIAGNOSIS OF LUNG CANCER
FILE REFERENCE: 210121.455016
CURRENT APPLICATION NUMBER: US/09/897,778
CURRENT APPLICATION NUMBER: 20010-6-28
NUMBER OF SEQ ID NOS: 467
SOFTWARE: RastsEQ for Windows Version 4.0
SEQ ID NO 336
LENGTH: 1336
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100.0%; Pred. No. 0;
ive 0; Mismatches
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Best Local Similarity 100.
Matches 1026; Conservative
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ORGANISM: Homo sapiens
US-09-897-778-336
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AAAGAACGGTGATGGTACGAAGCGCCCGTTTCGTCAGAACACACAGTGGTATCCAGATGAC
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June 24, 2003, 22:12:06; Search time 36 Seconds (without alignments) 2564.142 Million cell updates/sec
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GenCore version 5.1.6 Copyright (c) 1993 - 2003 Compugen Ltd.
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                                                                                                                                                                                                                                                                                                                                        671580 seqs, 206047115 residues
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1: sp_archea:* 2: sp_bacteria:* 3: sp_fungl:* 4: sp_mnan:* 5: sp_mnan:* 6: sp_mnan:* 7: sp_mncal:* 8: sp_organelle:* 9: sp_phage:* 10: sp_plant:* 11: sp_rodent:* 12: sp_vertebrate:* 13: sp_vertebrate:* 14: sp_unclassified:* 15: sp_rvius:* 17: sp_archeap:*

SPTREMBL_21:*

Database :

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

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		Score	448	410	410	410	410	410	410	379	341	341	341	341	341	284	284	284
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ALIGNMENTS

RESULT 09H3D2	JLT 1 N7
D A	09H3D2 PRELIMINARY; PRT; 487 AA.
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DE O	TA p63 gamma (P51 isoform TAP63GAMMA).
S O	Fos. Homo sapiens (Human).
8	Chordata;
58	Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
RN.	[1]
RP	SEQUENCE FROM N.A.
2	MEDLINE=98448095; Pubmed=9774969;
RA	Yang A., Kaghad M., Wang Y., Gillett E., Fleming M.D., Dotsch V.,
RA	Andrews N.C., Caput D., McKeon F.;
RŢ	"p63, a p53 homolog at 3q27-29, encodes multiple products with
RT	transactivating, death-inducing, and dominant-negative activities.";
R.	Mol. Cell 2:305-316(1998).
RN	[2]
RP	SEQUENCE FROM N.A.
æ	Hagiwara K., McMenamin M.G., Harris C.C.;
F.	Submitted (JAN-1999) to the EMBL/GenBank/DDBJ databases.
RN	[3]
КЪ	SEQUENCE OF 40-487 FROM N.A.
S S	TISSUE=SKELETAL MUSCLE;
ž	MEDLINE=98324755; PubMed=9662378;
Æ	Osada M., Ohba M., Kawahara C., Ishioka C., Kanamaru R., Katoh I.,
Z.	Ikawa Y., Nimura Y., Nakagawara A., Obinata M., Ikawa S.;
RI	"Cloning and functional analysis of human p51, which structurally and
RI	functionally resembles p53.";
K.	Nat. Med. 4:839-843(1998).
RN N	[4]
RP	SEQUENCE OF 40-487 FROM N.A.
ΚX	MEDLINE=20388515; PubMed=10935472;
ΚA	Tani M., Shimizu K., Kawahara C., Kohno T., Ishimoto O., Ikawa S.,
æ	Yokota J.;

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DSDLSDPMWPQYTNLGLLNSMDQQIQNGSSSTSPYNTDHAQNSVTAPSPYAQPSSTFDAL
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                                                 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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                                                                                                                                                                   Mutation and expression of the p51 gene in human lung cancer.";
                                                                                                                        MEDLINE-20388515; PubMed-10935472;
Tani M., Shimizu K., Kawahara C., Kohno T., Ishimoto O., Ikawa
Yokota J.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          361 LLYLPVRGRETYEMLLKIKESLELMQYLPQHTIETYRQQQQQHQHLLQK 410
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Prodom; PD002681; P53; 1.
PROSITE; PS00348; P53; UNKNOWN_1.
SEQUENCE 471 AA; 52882 MW; 32EB39798FCICE69 CRC64;
    01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
P51 isoform TAp63delta (P51 delta protein).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Last sequence update)
Last annotation update)
                                                                                                                                                                              Neoplasia 1:71-79(1999)

EMBL, AF116771; ARF6164.1; -
EMBL, AF116789; AAR44489.1; -
EMBL, AF116759; AAR43489.1; JOINED.
EMBL, AF116759; AAR43489.1; JOINED.
EMBL, AF116799; AAR43489.1; JOINED.
EMBL, AF116779; AAR43489.1; JOINED.
EMBL, AF116769; AAR43489.1; JOINED.
EMBL, AF116765; AAR43489.1; JOINED.
EMBL, AF116764; AAR43489.1; JOINED.
EMBL, AF116764; AAR43489.1; JOINED.
EMBL, AF116765; AAR43489.1; JOINED.
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(TrEMBLrel. 15, Last sequ
(TrEMBLrel. 19, Last anno
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Best Local Similarity 100.03
Matches 410; Conservative
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Pfam; PF00870; P53; 1.
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                                     Homo sapiens (Human)
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                                                                                                          SEQUENCE FROM N.A.
                                                                                NCBI_TaxID=9606
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O9P1B7;
01-OCT-2000
01-OCT-2000
01-DEC-2001
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"Mutation and expression of the p51 gene in human lung cancer."; Neoplasia 1:71-79(1999).
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Prodom; PD002681; P53; 1.
PROSITE; PS00348; P53; UNKNOWN_1.
SEQUENCE 487 AA; 55687 MW; 86CC865BDF2643DD CRC64;
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al Similarity 100.0%; Score 448; Cas Similarity 100.0%; Pred. No. 0; 448; Conservative 0; Mismatches
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                       EMBL, AF12459, AAG45609.1; EMBL, AF124529, AAG45609.1; JOINED. EMBL, AF124529, AAG45609.1; JOINED. EMBL, AF124539, AAG45609.1; JOINED. EMBL, AF124532, AAG45609.1; JOINED. EMBL, AF124532, AAG45609.1; JOINED. EMBL, AF124533, AAG45609.1; JOINED. EMBL, AF124533, AAG45609.1; JOINED. EMBL, AF075428, AAG45609.1; JOINED. EMBL, AF116770; AAR43486.1; JOINED. EMBL, AF116757, AAR43486.1; JOINED. EMBL, AF116757, AAR43486.1; JOINED. EMBL, AF116761, AAR43486.1; JOINED. EMBL, AF116761, AAR43486.1; JOINED. EMBL, AF116761, AAR43486.1; JOINED. EMBL, AF116763, AAR43486.1; JOINED. EMBL, AF116763, AAR43486.1; JOINED. EMBL, AF116764, AAR43486.1; JOINED. EMBL, AF116764, AAR43486.1; JOINED. EMBL, AF116764, AAR43486.1; JOINED. EMBL, AF116765, AAR43486.1; JOINED.
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Pfam; PF00870; P53; 1.
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MEDLINE-98448095; PubMed-9774969;
MEDLINE-98448095; PubMed-9774969;
Yang A., Kaghad M., Wang Y., Gillett E., Fleming M.D., Dotsch V.,
Andrews N.C., Caput D., McKeon F.;
"p63, a p53 homolog at 3q27-29, encodes multiple products with
transactivating, death-inducing, and dominant-negative activities.";
Mol. Cell 2:305-316(1998).
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                                                          Euteleostomi;
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Submitted (JAN-1999) to the EMBL/GenBank/DDBJ databases.
EMBL; AF124539; AAG45608.1;
EMBL; AF124539; AAG45608.1;
EMBL; AF124531; AAG45608.1;
EMBL; AF124531; AAG45608.1;
EMBL; AF124531; AAG45608.1;
EMBL; AF124533; AAG45608.1;
EMBL; AF124535; AAG45608.1;
EMBL; AF124535; AAG45608.1;
EMBL; AF124535; AAG45608.1;
EMBL; AF124536; AAG45608.1;
EMBL; AF124537; AAG45608.1;
EMBL; AF14578; AAG45608.1;

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PRINTS; PR00386; P53SUPRESSR.
ProDom: P0002681; P53; UNKNOWN_1.
PROSITE; PS00348; P53; UNKNOWN_1.
SEQUENCE 555 AA; 62433 MW; E22874BE7DBABCBE CRC64;
                                                       Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; E
Mammalia; Eutheria; Primates; Catarrhini; Hominidae;
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100.0%; Pred. No. 0;
iive 0; Mismatches
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Matches 410; Conservative
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                                (Human)
                                                                                                               NCBI_TaxID=9606
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                                                          Euteleostomi;
                                                                                                                                                                                                                                                                             "Mutation and expression of the p51 gene in human lung cancer."; Neoplasia 1:71-79(1999).
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                                                                                                                                                                                  MEDLINE-20388515; PubMed-10935472;
Tani M., Shimizu K., Kawahara C., Kohno T., Ishimoto O., Ikawa
Yokota J.;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Pfam: PF00870; P53; 1. PRINTS: PR00386; P53SUPPRESSR. Prodom: P0002681; P53: 1. PR0SITE; P800348; P53: UNKNOWN.1. SEQUENCE 516 AA: 57598 MW; 07553781103738B1 CRC64;
                                                    Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; E
Mammalia; Eutheria; Primates; Catarrhini; Hominidae;
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Last sequence update)
Last annotation update)
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EMBL, AF116756, AAF43488.1; --
EMBL, AF116757, AAF43488.1; JOINED.
EMBL, AF116759, AAF43488.1; JOINED.
EMBL, AF116769, AAF43488.1; JOINED.
EMBL, AF116761, AAF43488.1; JOINED.
EMBL, AF116762, AAF43488.1; JOINED.
EMBL, AF116764, AAF43488.1; JOINED.
EMBL, AF116765, AAF43488.1; JOINED.
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01-MAR-2001 (TrEMBLrel. 16,
01-MAR-2001 (TrEMBLrel. 16,
01-JUN-2002 (TrEMBLrel. 21,
TA p63 beta.
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Best Local Similarity 100.(
Matches 410; Conservative
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P51 isoform TAp63beta.
                                sapiens (Human).
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                                                                                                            NCBI_TaxID=9606;
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HSSP; P04637; 1)
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PRINTS: PRO0866; P53SUPPRESSR.
PRODOM: PD002681; P53; 1.
SWART; SW00454; SAM; 1.
PROSITE; PS00348; P53; UNKNOWN_1.
SEQUENCE 680 AA; 76776 MW; 654;
                                                                                                                          01-MAY-2000 (TrEMBLrel. 13, 01-MAY-2000 (TrEMBLrel. 13, 01-JUN-2002 (TrEMBLrel. 21,
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                                                                                                         PRELIMINARY;
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SEQUENCE FROM N.A.
TISSUE-SKELETAL MUSCLE;
MEDLINE-9834755; PubMed-9662378;
Osada M., Ohba M., Rawahara C., Ishioka C., Kanamaru R., Katoh I.,
IKawa Y., Nimura Y., Nakagawara A., Obinata M.;
"Cloning and functional analysis of human p51, which structurally and functionally."
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                                      Homo sapiens (Human).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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                                                                                                                                                                                                               'Mutation and expression of the p51 gene in human lung cancer.";
                                                                                                                                                                                   MEDLINE-20388515; PubMed-10935472;
Tani M., Shimizu K., Kawahara C., Kohno T., Ishimoto O., Ikawa
Yokota J.;
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SEQUENCE 641 AA; 72019 MW; 97AE61F66E63F618 CRC64;
              Last sequence update)
Last annotation update)
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01-NOV-1998 (TrEMBLrel. 08, Created)
01-NOV-1998 (TrEMBLrel. 08, Last sequen
01-JUN-2002 (TrEMBLrel. 21, Last annot:
P51 isoform TAP63ALPHA (P51B protein).
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AAF43487.1; JOINED.
AAF43487.1; JOINED.
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EMBL; AB016073; BAA32593.1;
EMBL; AF116769; AAF43487.1;
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Best Local Similarity 100.(
Matches 410; Conservative
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InterPro; IPR002117; P53.
InterPro; IPR001660; SAM.
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                                                                     NCBI_TaxID-9606;
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AF116756;
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Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
TISSUE-SKELETAL MUSCLE AND KERATINOCYTE CULTURE;
TISSUE-SKELETAL MUSCLE AND KERATINOCYTE CULTURE;
MUBDLINE-99018225; PubMed-9799841;
Augustin M., Bamberger C., Paul D., Schmale H.;
Cloning and chromosomal mapping of the human p53-related KET ge chromosome 3q27 and its murine homolog Ket to mouse chromosome 1 mann. Genome 9:899-902(1998).
HABME, SENGER, Y16961; CAA76562.1; ---
HSSP; P04637; IYCS.
InterPro; IPR002117; P53.
InterPro; IPR00117; P53.
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Last sequence update)
Last annotation update)
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130 TDYPGPHSFDVSFQQSSTAKSATWTYSTELKKLYCQIAKTCPIQIKVMTPPPQGAVIRAM 189
     340 FEARICACPGRDRKADEDSIRKOOVSDSTKNGDGTKRPFRONTHGIOMTSIKKRRSPDDE 399
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MEDIATE-98448055; BEQUENCE FRAME AND SEQUENCE SEQUENCE SEQUENCE SEQUENCE SEQUENCE SEQUENCE SEQUENCE SEQUENCE.
Andrews N.C., Caput D., McKeon F.;
"p63, a p53 homolog at 3427-29, encodes multiple products with transactivating, death-inducing, and dominant-negative activities.";
Moi. Cell 2:305-316(1998).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MEDLINE-20388515; Pubmed-10935472;
Tani M., Shimizu K., Kawahara C., Kohno T., Ishimoto O., Ikawa S.,
Yokota J.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Euteleostomi;
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                                                             LLYLPVRGRETYEMLLKIKESLELMQYLPQHTIETYRQQQQQQHQHLLQK
                                                                                    400 LLYLPVRGRETYEMLLKIKESLELMQYLPQHTIETYRQQQQQQHQHLLQK
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Eutele
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Hagiwara K., McMonamin M.G., Harris C.C.;
Submitted (JAN-1999) to the EMBL/GenBank/DDBJ databases.
EMBL; AR075429; AAC62634.;
EMBL; AR116758; AAR43490.1;
EMBL; AR116758; AAR43490.1;
EMBL; AR116759; AAR43490.1;
EMBL; AR116760; AAR43490.1;
EMBL; AR116762; AAR43490.1;
EMBL; AR116762; AAR43490.1;
EMBL; AR116762; AAR43490.1;
EMBL; AR116763; 
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Pfam, PP00870; P53; 1.
PR.NTS; PR00386; P53SUPPRESSR.
ProDom; PD002681; P53; 1.
PROSITE: PS00348; P53; UNKNOWN 1.
PROSITE: A93 AA; 44658 MW; C6689B83FD701610 CRC64;
                                                                                                                                                                                                                                                                                                                                   Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                    393 AA
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100.0%; Pred. No. 0;
ive 0; Mismatches
                                                                                                                                                                                                                                                                                                 01-NOV-1998 (TrEMBLrel. 08, Created)
01-NOV-1998 (TrEMBLrel. 08, Last seq
01-JUN-2002 (TrEMBLrel. 21, Last ann
P51 isoform DELNGAMMA (DN P63 gamma)
                                                                                                                                                                                                                                                    PRT;
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EMBL; AF124532; AAG45612.1;
EMBL; AF124533; AAG45612.1;
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EMBL; AF124535; AAG45612.1;
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AF116765; AAF43490.1
AF124540; AAG45612.1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    537; 1YCS.
IPR002117; P53.
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                                                                                                                                                                                                                                                    PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                              (Human)
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                                                           361
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EMBL;
EMBL;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            181 PQGAVIRAMPVYKKAEHVTEVVKRCPNHELSREFNEGQIAPPSHLIRVEGNSHAQYVEDP 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             279
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEARICACPGRDRKADEDSIRKQVSDSTKNGDGTKRPFRQNTHGIQMTSIKKRRSPDDE 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DSDLSDPMWPQYTNLGLLNSMDQQIQNGSSSTSPYNTDHAQNSVTAPSPYAQPSSTFDAL 120
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                241 ITGRQSVLVPYEPPQVGTEFTTVLYNFMCNSSCVGGMNRRPILLIIVTLETRDGQVLGRRC 300
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Yang A., Kaghad M., Wang Y., Gillett E., Fleming M.D., Dotsch V.,
Andrews N.C., Caput D., McKeon F.;

"F63, a p53 homolog at 3q27-29, encodes multiple products with
transactivating, death-inducing, and dominant-negative activities.";

Mol. Cell 2:305-316(1998).
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                                                                                                                                                                                                                                                                             Euteleostomi;
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0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Hagiwara K., McMenamin M.G., Harris C.C.;
Submitted (JAN-1999) to the EMBL/GenBank/DDBJ databases.
EMBL; AF124539; AAG45607.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SMART; SM00454; SAM; 1.
PROSITE; PS00348; P53; UNKNOWN_1.
SEQUENCE 680 AA; 76785 WW; F66ECD45E87D9799 CRC64;
                                                                                                                                                                                                                                            Homo sapiens (Human).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; E
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; 1
                                                                                                                                      Last sequence update)
Last annotation update)
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                                                           680 AA
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                                                                                                                Created)
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                                                           PRT;
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PRINTS; PR00386; P53SUPPRESSR.
ProDom; PD002681; P53; 1.
                                                                                                          01-MAR-2001 (TrEMBLrel. 16, 01-MAR-2001 (TrEMBLrel. 16, 01-JUN-2002 (TrEMBLrel. 21,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AF124534; AAG45607.1;
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                                                           PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A.
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AF124537;
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P04637; 13
                                                                                 Q9H3D4; Q9UP28
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RESULT 7
Q9H3D4
                                                             SOR BRAND DRAND DRAND BRAND BR
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PYEPPQVGTEFTTVLXNFMCNSSCVGGMNRRPILLIVTLETRDGQVLGRRCFEARICACP 309
               PYEPPQVGTEFTTVLYNFMCNSSCVGGMNRRPILIIVTLETRDGQVLGRRCFEARICACP
                                                                                                   70 PQYTNLGLLNSMDQQIQNGSSSTSPYNTDHAQNSVTAPSPYAQPSSTFDALSPSPAIPSN
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"In "Mutation and expression of the pilone in human lung cancer.";

"In "Neoplasia 1:71-79(1999).
"In EMBL; AF116769; AAF43492.1;
"In EMBL; AF116760; AAF43492.1;
"In EMBL; AF116760; AAF43492.1;
"In EMBL; AF116761; AAF43492.1;
"In EMBL; AF116763; AAF43492.1;
"In EMBL; AF116764; AAF43492.1;
"In EMBL; AF116765; AAF43492.1;
"In EMBL; AF116765; AAF43492.1;
"In EMBL; AF116765; AAF43492.1;
"In EMBL; AF116765; AAF43492.1;
"In EMBL; AF116766; AAF43492.1;
"In EMBL; AF116767; AAF43492.1;
"In EMBL; AF116767; AAF43492.1;
"In EMBL; AF116767; AAF43492.1;
"In EMBL; AF116767; AAF43492.1;
"In EMBL; AF116767;
"In EMBL; AF11677;
"In EMBL; AF116767;
"In E
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SEQUENCE FROM N.A.
MEDLINE-20388515; PubMed-10935472;
Tani M., Shimizu K., Kawahara C., Kohno T., Ishimoto O., Ikawa S.,
Yokota J.;
                                                                                                                                                                                                                                                                                                                                                                01-0CT-2000 (TrEMBLrel. 15, Created)
01-0CT-2000 (TrEMBLrel. 15, Last sequence update)
01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
P51 isoform delibeta.
Homo sapiens (Human).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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Pred. No. 0;
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                                                                                                                                                                                                                    ETYEMLLKIKESLELMQYLPQHTIETYRQQQQQQHQHLLQK 410
                                                                                                                                                                                                                                    461 AA
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100.0%; Pred. No. 0;
ive 0; Mismatches
                                                                                                                                                                                                                                                                                                                                       PRELIMINARY;
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Best Local Similarity 100.
Matches 341; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NCBI_TaxID-9606;
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194
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                                                                 PVYKKAEHVTEVVKRCPNHELSREFNEGQIAPPSHLIRVEGNSHAQYVEDPITGRQSVLV
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
NCBI_TaxID=9606;
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Tani M., Shimizu K., Kawahara C., Kohno T., Ishimoto O., Ikawa S., Yokota J.;
"Mutation and expression of the p51 gene in human lung cancer.";
"Neoplasia 1:71-79(1999).
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REMBL; AF116759; AAF43493.1; -
REMBL; AF116759; AAF43493.1; JOINED.
REMBL; AF116759; AAF43493.1; JOINED.
REMBL; AF116760; AAF43493.1; JOINED.
REMBL; AF116761; AAF43493.1; JOINED.
REMBL; AF116762; AAF43493.1; JOINED.
REMBL; AF116763; AAF43493.1; JOINED.
REMBL; AF116765; AAF43493.1; JOINED.
REMBL; AF116766; AAF43493.1; JOINED.
RICEPPO; IPRO02117; P53.
R PRINTS; PRO0386; P53; J.
R PRINTS; PRO0386; P53; J.
R PRINTS; PRO03861; P53; J.
R PRODENCE **16 AA** 46589 MW; A5974A14B25E3118 CRC64;
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01-OCT-2000 (TrEMBLrel. 15, Last sequence update)
01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
P51 1soform delNdelta.
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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SMART; SM00454; SAM; 1.
PROSITE: PS00348; P53; UNKNOWN_1.
PROSITE: PS00348; P53; UNKNOWN_1.
SROHENCE 586 AA; 65726 MW; .9A2316B631AF8634 CRC64;
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ive 0; Mismatches
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Replanta 1:71-79(1999).

EMBL: AF116758; AAF43491.1; JOINED. EMBL: AF116759; AAF43491.1; JOINED. EMBL: AF116761; AAF43491.1; JOINED. EMBL: AF116762; AAF43491.1; JOINED. EMBL: AF116763; AAF43491.1; JOINED. EMBL: AF116764; AAF43491.1; JOINED. EMBL: AF116765; AAF43491.1; JOINED. EMBL: AF116765; AAF43491.1; JOINED. EMBL: AF116765; AAF43491.1; JOINED. EMBL: AF116765; AAF43491.1; JOINED. EMBL: AF116766; AAF43491.1; JOINED. EMBL: AF116768; AAF43491.1; JOINED.
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MEDLINE=20388515; PubMed=10935472;
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Yang A., Kaghad M., Wang Y., Gillett E., Fleming M.D., Dotsch V.,
Andraws N.C., Caput D., McKeon F.;
"p63, a p53 homolog at 3427-29, encodes multiple products with
transactivating, death-inducing, and dominant-negative activities.";
Mol. Cell 2:305-316(1998).
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Washaryota: Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
NCBI_TaxID-9606;
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Submitted (JAN-1999) to the EMBL/GenBank/DDBJ databases.
Submitted (JAN-1999) to the EMBL/GenBank/DDBJ databases.
EMBL; AF124539; AAG45611.1; -
REMBL; AF124530; AAG45611.1; JOINED.
REMBL; AF124531; AAG45611.1; JOINED.
REMBL; AF124531; AAG45611.1; JOINED.
REMBL; AF124533; AAG45611.1; JOINED.
REMBL; AF124534; AAG45611.1; JOINED.
REMBL; AF124535; AAG45611.1; JOINED.
REMBL; AF124536; AAG45611.1; JOINED.
REMBL; AF124537; AAG45611.1; JOINED.
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PROSITE; PS00348; P53; UNKNOWN_1.
SEQUENCE 461 AA; 51404 MW; 68B63547A46C1B05 CRC64;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE FROM N.A.
MEDLINE-98448095; PubMed-9774969;
Yang A., Kaphad M., Wang Y., Gillett E., Fleming M.D., Dotsch V.,
Andrews N.C., Caput D., McReon F.;
"p63, a p53 homolog at 3427-29, encodes multiple products with
transactivating, death-inducing, and dominant-negative activities.";
Mol. Cell 2:305-316(1998).
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                                                                                                                                                                                                                                                                                                                                                           Homo sapiens (Human).
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
NCBI_TaxID=9606;
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Submitted (JAN-1999) to the EMBL/GenBank/DDBJ databases.

EMBL; AF016431; AAC6263611; --

EMBL; AF01627; AAC43038.1; --

EMBL; AF124539; AAC45610.1; JOINED.

EMBL; AF124539; AAC45610.1; JOINED.

EMBL; AF124531; AAC45610.1; JOINED.

EMBL; AF124533; AAC45610.1; JOINED.

EMBL; AF124533; AAC45610.1; JOINED.

EMBL; AF124534; AAC45610.1; JOINED.

EMBL; AF124535; AAC45610.1; JOINED.

EMBL; AF124536; AAC45610.1; JOINED.
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                                          PRINTS; PRUUJOU, PESS, 1
PRODOM: PD002681; P53; 1.
SMART; SMO0454; SAM; 1.
PROSITE; PS00348; P53; UNKNOWN_1.
                                                                                                                                                                                                                                            01-MAY-2000 (TrEMBLrel. 13, Created)
01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-UUN-2002 (TrEMBLrel. 21, Last annotation update)
                                                                                                                                                                                                           586 AA.
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PRINTS; PR00386; P53SUPPRESSR.
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SEQUENCE FROM N.A.
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MEDLINE-98448095; PubMed-9774969;
Yang A., Kadphad M., Gillett E., Fleming M.D., Dotsch V., Andrews N.C.,
Caput D., McKeon F.;
"p63, a p53 homolog at 3427-29, encodes multiple products with
transactivating, death-inducing, and dominant-negative activities.";
Mol. Cell 2:305-316(1998).
EMBL; AP075434; AAC62639.1; -.
PVYKKAEHVTEVVKRCPNHELSREFNEGQIAPPSHLIRVEGNSHAQYVEDPITGRQSVLV
                   310 GRDRKADEDSIRKQQVSDSTKNGDGTKRPFRQNTHGIQMTSIKKRRSPDDELLYLPVRGR
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Bukaryota, Metazoa, Chordata, Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus
NCBI_TaxID=10090;
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InterPro; IPR002117; P53.
Pfam; PF00870; P53; 1.
PRINTS; PR00386; P53SUPPRESSR.
ProDom; PD002681; P53; 1.
PROSITE; PS00348; P53; UNKNOWN_1.
SEQUENCE 483 AA; 54969 MW; A90ED0C110C50EAD CRC64;
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les 284; Conserv
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MEDLINE-98448095; PubMed-9774969;
MEDLINE-98448095; PubMed-9774969;
A Yang A., Kadhad M., Gillett E., Fleming M.D., Dotsch V., Andrews N.C.,
A Caput D., McKeon F.;
Transactivating, death-inducing, and dominant-negative activities.";
Transactivating, death-inducing, and dominant-negative activities.";
Transactivating, death-inducing, and dominant-negative activities.";
M. Mol. Cell 2:305-316(1998).
REMBL; AF075435; AAC62460.1; -.
REMBL; AF078435; AAC62460.1; -.
REMBL; AF07841175; PRO02117; P53.
RICETPC; IPRO02117; P53.
RICETPC; PRO0386; P53: 1.
REMBL; PRO0386; P53: 1.
REMBL; PRODMS; P63: UNKNOWN_1.
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Sukaryota Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus
NCBI_TaxID=10090;
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                            555 AA
                           PRT;
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Best Local Similarity 100.
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P56423 macaca fasc
P56424 macaca mula
Q2473 drosophila
P10105 drosophila
P54253 homo sapien
Q01371 neurospora
P17672 drosophila
P35142 bacillus fi
P26486 saccharomyc
P48671 carashius a
O46232 drosophila
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"Additional complexity in p73: induction by mitogens in lymphoid cells and identification of two new splicing variants epsilon and zeta.";
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                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens (Human).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Harris C.C.; "Mutational analysis of p73 and p53 in human cancer cell lines."; Oncogene 18:3415-3421(1999).
                                                                                                                                                                                                                                                                               P73_HUMAN STANDARD; PRT; 636 AA.
015350; 015351; 09NTK8;
16-0CT-2001 (Rel. 40, Created)
16-0CT-2001 (Rel. 40, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
Tumor protein p73 (p53-like transcription factor) (p53-related
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MEDLINE-98389621; PubMed-9721206;
Mai M., Huang H., Reed C., Qian C., Smith J.S., Alderete
Jenkins R., Smith D.I., Liu W.;
"Genomic organization and mutation analysis of p73 in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              oligodendrogliomas with chromosome 1 p-arm deletions.";
Genomics 51:359-363(1998).
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IISSUE-Lymphocytes, Breast cancer, Hepatoma, and Skin;
MEDLINE-99310938; PubMed-10381648;
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                                                       HMLA_DROME
ATX1_HUMAN
WC1_NEUCR
E75B_DROME
             P53_MACFA
P53_MACMU
KNIR_DROVI
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VIM1_CARAU
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MEDLINE-99021697; PubMed-9802988;
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MEDLINE-97433090; PubMed-9288759;
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                                                                                             June 24, 2003, 22:19:31; Search time 15 Seconds
             GenCore version 5.1.6
Copyright (c) 1993 - 2003 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                           Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                 112892 segs, 41476328 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      P53_CRIGR
P53_MESAU
HUNB_DRODA
HUNB_DROAA
AST5_DROME
                                                                                                                                                                                                                                                                                                                                                                                                     summar1es
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3_PLAFE
3_TETMU
3_BRARE
                                                                     - protein search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             P53_BARBU
P53_CHICK
P53_ONCMY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              P53_HORSE
P53_SPEBE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   P53_RAT
P53_CERAE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CAVPO
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            P53_XIPHE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                _BOVIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MARMO
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                                                                                                                                                                                                                      OLIGO
Gapop 60.0 , Gapext 60.0
                                                                                                                                                                                                                                                                                                                                                                                                     Post-processing: Listing first 45
                                                                                                                                                                                                                                                                                                                                                          length: 0
length: 2000000000
                                                                                                                                                            US-09-670-568B-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   B
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Match Length
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363
367
373
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381
382
386
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Maximum DB seq
                                                                                                                                                            Title:
Perfect score:
                                                                                                                                                                                                                       Scoring table:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               protein
                                                                                                                                                                                                                                                                                                                                                                                                                                 Database :
                                                                                                                                                                                                                                                                                                Word size
                                                                                                                                                                                          Sequence:
                                                                                                                                                                                                                                                                 Searched:
                                                                                                 Run on:
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9
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-1- SUBGNIT: THE C-TERMINAL OLIGOMERIZATION DOMAIN BINDS TO THE ABL
TYROSINE KINASE SH3 DOMAIN. ISOFORM BETA INTERACTS HOMOTYPICALLY
AND WITH P53, WHEREAS ISOFORM ALPHA DOES NOT. ISOFORM GAMMA
INTERACTS WITH ISOFORM GAMMA, ALPHA, AND HOMOTYPICALLY.

-1- SUBCELLULAR LOCATION: NUCLEAL.
-1- ALTERNATIVE PRODUCTS: 7 ISOFORMS; ALPHA (SHOWN HERE), BETA, GAMMA,
DELICA, EPSILON, ZETA AND KAPPA; ARE PRODUCED BY ALTERNATIVE
SPLICING. THE SPLICING OF EXON 11 IN GAMMA AND EPSILON ISOFORMS
RESULTS IN A FRAMESHIEF FROM THE ORIGINAL READING FRAME.
-1- TISSUE SPECIFICITY: BRAIN, KIDNEY, PLACENTA, COLON, HEART, LIVER,
TO THE ALPHA ISOFORM.
-1- INDUCTION: NOT INDUCED BY DANAGETY.
-1- INDUCTION: NOT INDUCED BY DANAGETY.
-1- DOMAIN: POSSEES AN ACIDIC TRANSACTIVATION DOMAIN, A CENTRAL DNA
BINDING DOMAIN AND A C-TERMINAL OLIGOMERIZATION DOMAIN THAT BINDS
-1- TICKER SELECTIVE STANSE SH3 DOMAIN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1- INE ABL IINCERN ALMOSOME REGION FREQUENTLY MUTATED IN DIVERSE CELL LINES OF HUMAN CANCER. APPEARS NOT TO BE FREQUENTLY MUTATED IN HUMAN CANCER, APPEARS NOT TO BE FREQUENTLY MUTATED IN HUMAN CANCERS, IN CONTRAST TO P53. HEMIZYGOSITY IS OBSERVED IN NEUROBLASTOMA AND OLIGODENDROGLIOMA.
                                                                                                    PHOSPHORYLATION (ISOFORMS ALPHA AND BETA).
MEDLINE-99318135; PubMed-10391251;
Yuan Z.-M., Shioya H., Ishiko T., Sun X., Gu J., Huang Y., Lu H.,
Kharbanda S., Weichselbaum R., Kufe D.;
"P73 is regulated by tyrosine kinase c-Abl in the apoptotic response
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Chi S.W., Ayed A., Arrowsmith C.H.;
"Solution structure of a conserved C-terminal domain of p73 with
"Solution structure of a conserved C-terminal domain of p73 with
EMBO J. 18:4438-4444(1999).

-I- FUNCTION: PARTICIPATES IN THE APOPTOTIC RESPONSE TO DNA DAMAGE.
WHEN OVERPRODUCED, ACTIVATES TRANSCRIPTION FROM P53-RESPONSIVE
PROMOTERS AND INDUCES APOPTOSIS. MAY BE A TUMOR SUPPRESSOR
                                                                                                                                                                                                                                                                         Lu H.,
                                                                                                                                                                                                                                                            Yuan Z.-M., Shioya H., Ishiko T., Sun X., Gu J., Huang Y.,
Kharbanda S., Weichselbaum R., Kufe D.;
Nature 400:792-792(1999).
                                                                   Submitted (MAY-2000) to the EMBL/GenBank/DDBJ databases
                                                                                                                                                                                                                                                                                                                                                                                              Natl. Cancer Inst. 91:594-598(1999).
                                      (ISOFORM KAPPA).
 Cell Death Differ. 6:389-390(1999)
                                                                                                                                                                                                                                                                                                                                               MEDLINE=99217940; PubMed=10203277;
Kaelin W.G. Jr.;
"The emerging p53 gene family.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                   MEDLINE=99380160; PubMed=10449409;
                                                                                                                                                                                                                                                                                                                                                                                                                                     STRUCTURE BY NMR OF 439-506
                                                                                                                                                                                        to DNA damage.";
Nature 399:814-817(1999).
                                SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                  FUNCTION
                                                                                                                                                                                                                                            ERRATUM.
                                                      homas
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MISSING (IN ISOFORM GAMMA).
SHLQ -> TWGP (IN ISOFORM DELTA).
SHLQPESYGPLSPHNKVHGGMNKLPSVNGLVGQPPHSSA
SHLQPPSYGPVLSPHNKVHGGMNKLPSVNGLVGQPPHSSA
ATPNL -> PRDAQQPWPRSASQQRRDEQQPQRPVHGLGVP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ISOUGONA TARYA).
SFLTGGCONGIEVETSQGLQSIYHLQNLTIEDLGALKIPE
QYRMTIWRGLQDLKQQHDYSTAQQLLRSSNRATISIGGSGE
LQRQRVMEAVHFRVRHTITIPNRGGPGGGPDEWADFGFDLP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SHLÓPPSYGPVLSPMNKVHGGMNKLPSVNOLVGQPPPHSSA
ATPNLGPVGPGMLNNHGHAVPANGEMSSSHSAQSMV -> P
RDAQQPWPRSASQQRRDEQQPQRPVHGLGVPLHSATPLPRR
                                                                                                                                                                                                                                                                                                                                                                            ASP/GLU-RICH (ACIDIC).
NUCLEAR LOCALIZATION SIGNAL (POTENTIAL).
MEDIATES OLIGOMERIZATION (POTENTIAL).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DCKARKQPIKEEFTEAEIH -> RTWGP (IN ISOFORM
                                                                                                                                                                                                                                                                                                                                                                                                                                              PHOSPHORYLATION (BY ABL: ISOFORM BETA).
G -> GNTRCRHWVLCGDRGLSRPVLQGPSG (IN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       POPROFFNRIGVSKLHRVFHLPRVTEHLPPAEPDH (IN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                  Phosphorylation; Alternative splicing;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LHSATPLPRRPOPR (IN ISOPORM EPSILON).
MISSING (IN ISOPORM EPSILON).
MISSING (IN ISOPORM ZETA).
A467493C5D93EEEO CRG64;
                                                                                                                                                                                                                                                                                                                                     Transcription regulation; Activator; DNA-binding; Anti-oncogene;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                   TRANSACTIVATION (BY SIMILARITY).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4.9%; Score 22; DB 1; Length 636; 100.0%; Pred. No. 5.2e-14; ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                           POLY-PRO.
DNA-BINDING (POTENTIAL).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ISOFORM GAMMA).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ISOFORM KAPPA)
                                                                                                                                                                                                                                                                                                                                                                                                          POLY-PRO.
POLY-GLN.
                     JOINED.
                                         JOINED.
                                                             JOINED.
                                                                                                                                                                             JOINED.
JOINED.
                                                                                          JOINED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BETA).
                                                                                                     JOINED
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ProDom; PD002681; P53; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      69623 MW;
                               AAC61887.1;
AAC61887.1;
                                                                                                                                                                                                                                                                                                                                               Apoptosis; Nuclear protein; 3D-structure,
                                                AAC61887.1;
AAC61887.1;
AAC61887.1;
                                                                                                                                                 AAD39696.1;
AAD39696.1;
                                                                                                                                                                                       AAD39696.1;
AAD39696.1;
                                                                                                                                                                                                          CAB92742.1;
                                                                                                                     AAD39696.1;
AAD39696.1;
AAD39696.1;
                                                                                                                                                                                                                                                       InterPro; IPR002117; P53.
InterPro; IPR001660; SAM.
Pfam; PF00536; SAM; 1.
Pfam; PF00870; P53; 1.
                                                                               AAD39696.
                                                                                                            AAD39696.
                                                                                                                                                                     AAD39696
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                                                                                                                                                                                                                                                                                                                            PROSITE; PS00348; P53;
                                                                                                                                                                                                                                                                                                                                                                   46
304
435
171
486
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403
636
445
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                                                                                                                                                                                                                                                                                                                   SAM;
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400 4
636 AA;
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                                                                                                                                                                                                                            FRANSFAC; T0493
                                                                                                                                                                                                                                                                                                                   SM00454;
                                                                                                  AF079083:
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                                                                                                                                                                    AF079090;
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400
404
400
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VARSPLIC
SEQUENCE
                                                                                                                                                                                                                                                                                                         ProDom;
SMART; SI
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VARSPLIC
VARSPLIC
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          EMBL;
EMBL;
EMBL;
                                                 EMBL;
EMBL;
                                       EMBL;
                                                                                                                                                                                                                                       Genew;
                                                                                                                                                                                                                                                                                                                                                                                     DOMAIN
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                                                                     EMBL;
                                                                                                                                                                                       EMBL;
                                                                                                                                                                                                EMBL;
                                                                                                                                                                    EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
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EMBL; Y11416; CAA72221.1; -.
EMBL; X11416; CAA72219.1; -.
EMBL; AF077628; AAC61887.1; -.
EMBL; AF077616; AAC61887.1; JOINED.
EMBL; AF077617; AAC61887.1; JOINED.

EMBL; Y11416; CAA72220.1; -.

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qq

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253 LYNFMCNSSCVGGMNRRPILLI 274
                                                      RESULT 3
P53_BARBU
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SMART: SMOWGOG; SLW.
PROSITE: PSOGGAGG F. 53.
Transcription regulation; Activator: DNA-binding; Anti-oncogene;
Transcription regulation; Phosphorylation; Alternative splicing.
Apoptosis; Nuclear protein; Phosphorylation; Alternative splicing.
VARSFLIC 495 637 SFLNGGGPORTIEYFROSOGGARIALINGNITIEDGGALKIPE
OXRAFINGGGDIAGSUNAAISIGGSG
QYRMTINGGODIAGSUNAAISIGGSG
QYRMTINGGODIAGSUNAAISIGGSG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PROTEIN (BY SIMILARITY).

-!- SUBUNT: THE C-TERMINAL OLIGOMERIZATION DOMAIN BINDS TO THE ABL TYROSINE KINASE SH3 DOMAIN. ISOFORM BETA INTERACTS HOMOTYPICALLY AND WITH P53, WHEREAS ISOFORM ALPHA DOES NOT.

-!- SUBCELLULAR LOCATION: Nuclear.

-!- ALTERNATIVE PRODUCTS: 2 ISOFORMS; ALPHA (SHOWN HERE) AND BETA;
ARE PRODUCED BY ALTERNATIVE SPLICING.

-!- DOMAIN: POSSEBES AN ACIDIC TRANSACTIVATION DOMAIN, A CENTRAL DNA BINDING DOMAIN AND A C-TERMINAL OLIGOMERIZATION DOMAIN THAT BINDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PDCKARKQPIKEEFTEAEIH -> RTWGP (IN ISOFORM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                            Cercopithecus aethiops (Green monkey) (Grivet).
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia; Eutheria; Primates; Catarrhini, Cercopithecidae,
Cercopithecinae; Cercopithecus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                          16-0CT-2001 (Rel. 40, Created)
16-0CT-2001 (Rel. 40, Last sequence update)
16-0CT-2001 (Rel. 40, Last annotation update)
Tumor protein p73 (p53-like transcription factor) (p53-related
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4.9%; Score 22; DB 1; Length 637; 000.0%; Pred. No. 5.2e-14;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 7CB200B919C9C70A CRC64;
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0
                                                                                                           637 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 4.9%; Score 22; DB Best Local Similarity 100.0%; Pred. No. 5.2 Matches 22; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TO THE ABL TYROSINE KINASE SH3 DOMAIN.
253 LYNFMCNSSCVGGMNRRPILII 274
                                                                                                           PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRINTS; PR00386; P53SUPPRESSR.
ProDom; PD002681; P53; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   69630 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   EMBL; Y11419; CAA72224.1; -. EMBL; Y11419; CAA72225.1; -. HSSP; O15350; 1COK.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           InterPro; IPR002117; P53.
InterPro; IPR001660; SAM.
Pfam; PF00536; SAM; 1.
Pfam; PF00870; P53; 1.
                                                                                                             STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               637 AA;
                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                    NCBI_TaxID-9534;
                                                                                                             P73_CERAE
Q9XSK8; Q9TSQ9;
                                                                                                                                                                                                                                                                                                                                                                                         TISSUE-Kidney;
                                                                                                                                                                                                                                          TP73 OR P73.
                                                                                                                                                                                                                                                                                                                                                                                                               Caput D.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE
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264 LYNFMCNSSCVGGMNRRPILLI 285

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                             NUCLEAR LOCALIZATION SIGNAL (POTENTIAL).
PHOSPHORYLATION (BY SIMILARITY).
OBE2CF2CEA74C304 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                      Barbus barbus (Barbel).
Bukaryota: Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Actinopterygii; Neopterygii; Teleostei; Ostariophysi; Cypriniformes;
Cyprinidae; Barbus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Anti-oncogene; DNA-binding; Transcription regulation; Activator; Nuclear protein; Phosphorylation; Apoptosis.

1 28 TRANSCRIPTION ACTIVATION (ACIDIC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BY SIMILARITY.
OLIGOMERIZATION.
BASIC (REPRESSION OF DNA-BINDING)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BAX and FAS antigen expression, or by repression of Bcl-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 15; DB 1; Length 369; Pred. No. 3.6e-07;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         expression (By similarity).
-!- SUBUNIT: Binds DNA as a homotetramer (By similarity).
-!- SUBCELLULAR LOCATION: Nuclear.
-!- SIMILARITY: BELONGS TO THE P53 FAMILY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                         16-OCT-2001 (Rel. 40, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
Cellular tumor antigen p53 (Tumor suppressor p53).
369 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   367 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   100.0%; Prec. ...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     InterPro; IPR002117; P53.
Pfam; PF00870; P53; 1.
PRINTS; PR000386; P535UPPRESSR.
ProDom; P0002681; P53; 1.
PROSITE; PS00348; P53; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                EMBL; AF071570; AAD34212.1; -.
                                    16-OCT-2001 (Rel. 40, Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              41233 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        259 EFTTVLYNFMCNSSC 273
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               192 - EFTTVLYNFMCNSSC 206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 15; Conservative
STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       66
298
342
276
368
369 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Similarity
                                                                                                                                                                                                                                             [1]
SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        HSSP; P04637;
                                                                                                                       TP53 OR P53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   P53_CHICK
P10360;
P53_BARBU
09W678;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DOMAIN
MOD_RES
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DNA_BIND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Best Local
Matches 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DOMAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 4
P53_CHICK
ID P53_C
AC P1036
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Euteleostom1;

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                                                                                                                                                                                                   MEDLINE=92210006; Pubmed=1339362; de Fromentel C.C., Padkel F., Chapus A., Baney C., May P., Soussi T.; "Rainbow trout p53: cDNA cloning and biochemical characterization."; Gene 112:241-245(1992).
                                                                                                                                                                                                                                                                                                    growth arrest or apoptosis depending on the physiological circumstances and cell type. Involved in cell cycle regulation as a trans-activator that acts to negatively regulate cell division by controlling a set of genes regulared for this process. One of the activated genes is an inhibitor of cyclin-dependent kinases. Apoptosis induction seems to be mediated either by stimulation of BAX and FAS antigen expression, or by repression of Bcl-2 expression (By similarity).

-I SUBCELLUIAR LOCATION: Nuclear.

-I SUBLIARITY: BELONGS TO THE P53 FAMILY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BASIC (REPRESSION OF DNA-BINDING).
WUCLEAR LOCALIZARION SIGNAL (POTENTIAL).
PHOSPHORYLATION (BY SIMILARITY).
8422250765545AIC CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TP53 OR P53.
Oryzias latipes (Medaka fish) (Japanese ricefish).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostoml; Actinopterygii; Neopterygii; Teleostei; Euteleostei; Neoteleostei;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Anti-oncogene; DNA-binding; Transcription regulation; Activator;
                                                            Oncorhynchus mykiss (Rainbow trout) (Salmo gairdneri).
Eukaryota: Metazoa; Chordata; Craniata; Vertebrata; Buteleost
Actinopterygii; Neopterygii; Teleostei; Euteleostei;
Protacanthopterygii; Salmoniformes; Salmonidae; Oncorhynchus.
NCBI_TaxID=8022;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Nuclear protein; Phosphorylation; Apoptosis,
DOMAIN 1 TRANSCRIPTION ACTIVATION (ACIDIC)
                     Cellular tumor antigen p53 (Tumor suppressor p53).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        P53_ORYLA STANDARD; PRT; 352 AA. P79820; O9PSU7; O9PSU8; O1-NOV-1997 (Rel. 35, Created) 15-JUN-2002 (Rel. 41, Last sequence update) 15-JUN-2002 (Rel. 41, Last annotation update) cellular tumor antigen p53 (Tumor suppressor p53).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4e-05;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                OLIGOMERIZATION.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BY SIMILARITY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Pred, No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2.50,
100.0%; Pre
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRINTS; PR00386; P53SUPPRESSR. ProDom; PD002681; P53; 1. PROSITE; PS00348; P53; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               43966 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EMBL; M75145; AAA49605.1; -. PIR; JH0631; JH0631.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2.98;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PIR, JH0631, JH0631.
HSSP; P04637; 1TUP.
InterPro; IPR002117; P53.
Pfam; PF00870; P53; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   261 TTVLYNFMCNSSC 273
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         219 TTVLYNFMCNSSC 231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 392
318
                                                                                                                                                                                    SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           . 396 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity
Matches 13; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           325
369
303
395
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SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DNA_BIND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DOMAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         P53_ORYLA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 6
                       δλ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the Buropean Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@lsb-sib.ch).
                                                                                                                                                                                                                                                                                                                                        Nucleic Acids Res. 16:11383-11383(1988).

1 FUNCTION: Acts as a tumor suppressor in many tumor types; induces growth arrest or apoptosis depending on the physiological circumstances and cell type. Involved in cell cycle regulation as circumstances and cell type. Involved in cell cycle regulation as by controlling a set of genes required for this process. One of the activated genes is an inhibitor of cyclin dependent kinases. Apoptosis induction seems to be mediated either by stimulation of expression (By similarity).

1. SUBUNIT: Binds DNA as a homotetramer (By similarity).

2. SUBCELLUAR LOCATION: Nuclear.

2. SUBCELLUAR ELOCATION: Nuclear.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ó
                                                                                                  Gallus gallus (Chicken).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NUCLEAR LOCALIZATION SIGNAL (POTÉNTIAL).
PHOSPHORYLATION (BY SIMILARITY).
FC37D0FCDF9195B6 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Anti-oncogene; DNA-binding; Transcription regulation; Activator; Nuclear protein; Phosphorylation; Apoptosis.

1 30 TRANSCRIPTION ACTIVATION (ACIDIC).
                                                                                                                                                                                                                                                                                                        "Nucleotide sequence of a cDNA encoding the chicken p53 nuclear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BASIC (REPRESSION OF DNA-BINDING)
NUCLEAR LOCALIZATION SIGNAL (POTE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DB 1; Length 367;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0; Indels
01-MAR-1989 (Rel. 10, Created)
01-MAR-1989 (Rel. 10, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
Cellular tumor antigen p53 (Tumor suppressor p53).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3.8e-05;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 OLIGOMERIZATION.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         100.0%; Pred. No. 3.8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BY SIMILARIT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 13;
                                                                                                                                                                                                                                            STRAIN-SPAFAS;
MEDLINE-89083584; PubMed-3060861;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 HSSP, P04637, 1TUP.
InterPro; IPR002117; P53.
Pfam; PF00870; P53; 1.
PRINTS; PR00386; P53SUPPRESSR.
ProDom; PD0022681; P53; 1.
PROSITE; PS00348; P53; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               40169 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            EMBL; X13057; CAA31456.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        111111111111
216 TTVLYNFMCNSSC 228
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     22,
22,
41,
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347
292
366
367 AA;
                                                                                                                                                                                                                        SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Similarity
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(Rel.
                                                                                                                                                                                      NCBI_TaxID-9031;
                                                                                                                                                                                                                                                                                                                                oncoprotein
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01-MAY-1992 (
01-MAY-1992 (
15-JUN-2002 (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          P53_ONCMY
P25035;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DNA_BIND
DOMAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MOD_RES
SEQUENCE
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Gaps

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Query Match Best Local

Matches

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P53_ONCMY RESULT

garage garage

DOMAIN

Length 396; 0; Indels

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Q64397; P97258; P97788;
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                                                                                                                                                                                                            SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A.
TISSUE-Liver;
                                                                                                                                                           Cricetulus.
NCBI_TaxID-10029;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 expression
                                                                                      IP53 OR P53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DNA_BIND
DOMAIN
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DOMAIN
MOD_RES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  VARIANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /ARIANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DOMAIN
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                                                                                                                                                                                                                                                       Atkinson D.N., Gumerlock P.H., Wong J.T.Y., Hsleh D.P.H.;

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NUCLEAR LOCALIZATION SIGNAL (POTENTIAL).
PHOSPHORYLATION (BY SIMILARITY).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                 Krause M.K., Rhodes L.D., van Beneden R.J.; "Cloning of the p53 tumor suppressor gene from the Japanese medaka ("Cloning of the p53 tumor suppressor gene from the Japanese medaka exposed fish."; exposed fish.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Anti-oncogene; DNA-binding; Transcription regulation; Activator;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Nuclear protein; Phosphorylation; Apoptosis; Polymorphism.
DOMAIN 1 48 TRANSCRIPTION ACTIVATION (ACIDIC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
 Acanthomorpha; Acanthopterygii; Percomorpha; Atherinomorpha; Beloniformes; Adrianichthyidae; Oryziinae; Oryzias.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2.5%; Score 11; DB 1; Length 352;
100.0%; Pred. No. 0.0038;
ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S -> T.
MISSING (IN REF. 1).
196868A6635IBFF5 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BY SIMILARITY.
OLIGOMERIZATION.
BASIC (REPRESSIO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  393 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    -1 - SUBCELLULAR LOCATION: Nuclear.
                                                                                                                                                                                                                            SEQUENCE FROM N.A., AND VARIANT THR-91.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRT;
                                                                                      FISSUE-Liver;
MEDLINE-97305153; PubMed-9161419;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  EMBL; AF003949; AAD01195.1; -. EMBL; AF003950; AAD01196.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              22 M. 39753 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Pfam; PF00870; P53; 1.
PRINTS; PR00386; P53SUPPRESSR.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                EMBL; U57306; AAC60146.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   HSSP; P04637; 1YCS.
InterPro; IPR002117; P53.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ProDom; PD002681; P53; 1.
PROSITE; PS00348; P53; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match 2.5
Best Local Similarity 100.
Matches 11; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       304 RICACPGRDRK 314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gene 189:101-106(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                352 AA;
                                                                    SEQUENCE FROM N.A.
                                  NCBI_TaxID-8090;
                                                                                                                                                                                                                                              STRAIN-Himedaka;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                P53_CRIGR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DNA_BIND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE
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P53_CRIGR
ID P53_C
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NUCLEAR LOCALIZATION SIGNAL (POTENTIAL).
PHOSPHORYLATION (BY SIMILARITY).
L -> Q (IN CELL LINE V79-4).
C -> W (IN CELL LINE V79-4).
Y -> F (IN REF. 2).
ZA7830E788311689 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SUBUNIT: Binds DNA as a homotetramer (By similarity).
SUBCELLULAR LOCATION: Nuclear.
BISEASE: F3 IN INCREASED AMOUNTS IN A WIDE VARIETY
OF TRANSFORMED CELLS. P3 IS FREQUENTLY MUTATED OR INACTIVATED
                                                                                                                                               Cricetulus griseus (Chinese hamster).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Cricetinae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Anti-oncogene; DNA-binding; Transcription regulation; Activator; Nuclear protein; Phosphorylation; Apoptosis.

TRANSCRIPTION ACTIVATION (ACIDIC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BASIC (REPRESSION OF DNA-BINDING)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Lee H., Larner J.M., Hamlin J.L.; "Cloning and characterization of Chinese hamster p53 cDNA."; Gene 184:177-183(1997).
                                                                                                                                                                                                                                                                                                                                                                    Chaung W., Mi L.J., Boorstein R.J.;
Submitted (MAR-1997) to the EMBL/GenBank/DDBJ databases.
01-NOV-1997 (Rel. 35, Created)
1-NOV-1997 (Rel. 35, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
Cellular tumor antigen p53 (Tumor suppressor p53).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BY SIMILARITY.
OLIGOMERIZATION.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SIMILARITY: BELONGS TO THE P53 FAMILY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MEDLINE-97183659; PubMed-9031625;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        InterPro; IPR002117; P53.
Pfam; PF00870; P53; 1.
PRINTS; PR00386; P53SUPPRESSR.
ProDom; P0002681; P53; 1.
PROSITE; PS00348; P53; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            43378 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               EMBL; Y08900; CAA70108.1; -. EMBL; Y08901; CAA70109.1; -. EMBL; U50395; AAC53040.1; -. EMBL; D86070; BAA13004.1; -. HSSP; P04637; ITUP.
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304 RICACPGRDR 313
                                    11111111
273 RICACPGRDR 282
                                                                                          RESULT 9
P53_MESAU
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation use by non-profit institutions as long as its content is in no way endified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                   Park U., Lee Y.;
"Wild-type p53 sequence of tree shrews.";
"Wild-type p53 sequence of tree shrews.";
Submitted (AdG-1999) to the EMBL/GenBank/DDBJ databases.
-I-FUNCTION: Acts as a tumor suppressor in many tumor types; induces growth arrest or apoptosis depending on the physiological circumstances and cell type. Involved in cell cycle regulation as by controlling a set of genes required for this process. One of the activated genes is an inhibitor of cyclin-dependent kinases. BAX and FAS antigen expression, or by repression of Bcl-2
                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  387 BASIC (REPRESSION OF DNA-BINDING).
323 NUCLEAR LOCALIZATION SIGNAL (POTENTIAL).
392 PHOSPHORYLATION (BY SIMILARITY).
43552 MW; FD9F36603945A1FA CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SUBUNIT: Binds DNR as a homotetramer (By similarity).
SUBCELLUIAR LOCATION: Nuclear.
DISEASE: P53 IS FOUND IN INCREASED AMOUNTS IN A WIDE VARIETY
OF TRANSFORMED CELLS. P53 IS FREQUENTLY MUTATED OR INACTIVATED
                                                                                                                                                                                                                                                                     Tupata glis belangeri (Common tree shrew).
Ekkaryota; Wetazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutherla; Scandentia; Tupalidae; Tupaia.
NCBL_TaxID-9396;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              HSSP; P04637; 1YCS.

InterPro: IRRO02117; P53.

Pfam: PF00870; D53.1.

PRINTS: PR00386; P5391PRESSR.

Probom: PD002661; P53; 1

PROSTUE: PS00348; P53; 1

Anti-oncogene: DNA-binding: Transcription regulation; Activator; DOMAIN

I 44 TRANSCRIPTION ACTIVATION (ACIDIC).

DOMAIN 325 356

OLIGOMERIZATION.
                                       ö
         Length 393;
 2.2%; Score 10; DB 1; Length 393
100.0%; Pred. No. 0.043;
/ative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 393;
                                                                                                                                                                                                                                         Cellular tumor antigen p53 (Tumor suppressor p53).
TP53 OR P53.
                                                                                                                                                                                                             40, Last sequence update)
41, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BY SIMILARITY.
OLIGOMERIZATION.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2.2%; Score 100.0%; Pred. No. 0.043
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                -!- SIMILARITY: BELONGS TO THE P53 FAMILY.
                                                                                                                                                                                                                                                                                                                                                        STRAIN-Chinensis; TISSUE-Liver;
                                                                                                                                                                                            16-OCT-2001 (Rel. 40, Created)
16-OCT-2001 (Rel. 40, Last seq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EMBL; AF175893; AAF22640.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                IN MANY TYPES OF CANCER.
                            10; Conservative
                                                                                                                                                                    STANDARD;
                                                       304 RICACPGRDR 313
                                                                           273 RICACPGRDR 282
                 Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  102
325
368
311
392
393 AA;
                                                                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A.
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                                                                                                                                                                                                          16-OCT-2001
15-JUN-2002
                                                                                                                                                               P53_TUPGB
Q9TTA1;
Query Match
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SEQUENCE
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Matches
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                                                                                                                                                                                                                             Legros Y., McIntyre P., Soussi T.;
"The cDNA cloning and immunological characterization of hamster p53.";
Gene 112:247-250(1992).
                                                                                                                                                                                                                                                                  BY SIMILARITY.
OLIGOMERIZATION.
BASIC (FEPRESSION OF DNA-BINDING).
NUCLEAR LOCALIZATION SIGNAL (POTENTIAL).
PHOSPHORYLATION (BY SIMILARITY).
G -> S (IN REF. 2).
                                                                                                                                                                                                                                                                                                                                                                                                                                                 -1- SUBDNIT: Binds DNA as a homotetramer (By similarity).
-1- SUBCELULAR LOCATION: Nuclear.
-1- DISEASE: P53 IS FOUND IN INCREASED AMOUNTS IN A WIDE VARIETY OF FRANSPORMED CELLE, P53 IS FREQUENTLY MUTATED OR INACTIVATED IN MANY TYPES OF CANCER.
                                                                                                 Mesocricetus auratus (Golden hamster).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Cricetinae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Anti-oncogene; DNA-binding; Transcription regulation; Activator;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Nuclear protein: Possphorylation; Apoptosis.

DOMAIN 1 45 Protein: TRANSCRIPTION ACTIVATION (ACIDIC).

BY SIMILARITY.

DOMAIN 328 359 OIIGOMERITATION
P53_MESAU STANDARD; PRT; 396 AA. 000366; P97276; Coll-DEC-1992 (Rel. 24, Created) 01-DEC-1992 (Rel. 24, Last sequence update) 15-JUN-2002 (Rel. 41, Last annotation update) cellular tumor antigen p53 (Tumor suppressor p53).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         -!- SIMILARITY: BELONGS TO THE P53 FAMILY.
                                                                                                                                                                                      SEQUENCE FROM N.T.
STRAIN-SYTHAN, TISSUE-KIDNEY;
MEDLINE-92210007; Pubmed-155573;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    InterPro; IPR002117; P53.
Pfam; PF00870; P53; 1.
PRINTS; PR00386; P53SUPPRESSR.
PRODOM; PD002681; P53; 1.
PROSITE; PS00348; P53; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EMBL; M75144; AAA37085.1; -.
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HSSP; P04637; 1TUP.
                                                                                                                                                                                  SEQUENCE FROM N.A.
                                                                                                                                                          NCBI_TaxID-10036;
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CONFLICT
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Gaps

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10; Conservative

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SEQUENCE FROM N.A.
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NON_TER
SEQUENCE
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DOMAIN
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Matches
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                                                                                                                                                                                                                                                                                                                  Syst. Biol. 46:654-673(1997).
-!- FUNCTION: GAP CLASS SEGMENTATION PROTEIN THAT CONTROLS DEVELOPMENT OF HEAD STRUCTURES (BY SIMILARITY).
-!- SUBCELLULAR LOCATION: Nuclear (By similarity).
-!- SIMILARITY: BELONGS TO THE HUNCHBACK FAMILY OF C2H2-TYPE ZINC-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                           Gaps
                                                                                                                                                                                                            Drosophila dasycnemia (Fruit fly).

Eukaryota; Metazoa; Arthropoda; Mandibulata; Pancrustacea; Hexapoda;
Insecta; Pterygota; Neoptera; Endopterygota; Diptera; Brachycera;
Muscomorpha; Ephydroidea; Drosophilidae; Drosophila.
                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A.
Baker R.H., Desalle R.;
"Multiple sources of character information and the phylogeny of Hawaiian Drosophilids.";
                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                      Length 396;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 195;
                                          Indels
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43631 MW; 906EF02568099BE3 CRC64;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FlyBase; FBgn0024669; Ddas\hb.
Developmental protein; Gap protein; Zinc-finger;
Metal-binding; DNA-binding; Repeat; Nuclear protein.
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                     DB 1;
0.043;
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Pred. No. 0.23;
0; Mismatches
                                                                                                                                                                   40, Last sequence update)
40, Last annotation update)
                   Score 10; DB : Pred. No. 0.0000; Mismatches
                                                                                                                                     195 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      HUNB_DROAA STANDARD; PRT; 196 AA. 046235, 046235, 116-027-2001 (Rel. 40, Created) 16-027-2001 (Rel. 40, Last sequence update)
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POLY-GLN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              POLY-ALA.
                                                                                                                                       PRT;
                   2.2%; Scoilarity 100.0%; P. Conservative 0;
                                                                                                                                             046262; 046263;
16-007-2001 (Rel. 40, Created)
16-007-2001 (Rel. 40, Last sent
16-007-2001 (Rel. 40, Last and
                                                                                                                                                                                        Hunchback protein (Fragments).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2.0%; 5
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                                                                                                                                     STANDARD;
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                                                                         111111111
276 RICACPGRDR 285
                                                              304 RICACPGRDR 313
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81
103
136
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396 AA;
                             Local Similarity
es 10; Conserv
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                                                                                                                                                                                                                                                     NCBI_TaxID=58308;
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 SEQUENCE
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SEQUENCE
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                     Query Match
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Best Local
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Matches
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                                                                                                                            HUNB_DRODA
                                        Matches
                                                                                                                  RESULT 10
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                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A.

Baker R.H., Desaile R.;

"Multiple sources of character information and the phylogeny of

"Multiple sources of character information of the phylogeny of

"Watailan Drosophilids.";

Syst. Biol. 46:654-673(1997).

-!- FUNCTION: GAP CLASS SEGMENTATION PROTEIN THAT CONTROLS DEVELOPMENT

OF HEAD STRUCTURES (BY SIMILARITY).

-!- SUBCELLULAR LOCATION: Nuclear (By similarity).

-!- SIMILARITY: BELONGS TO THE HUNCHBACK FAMILY OF C2H2-TYPE ZINC-

FINGER PROTEINS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STRAIN=Canton-S;
MEDLINE=87273503; PubMed=3111716;
Villares R., Cabrera C.V.;
"The achaete-scute gene complex of D. melanogaster: conserved domains in a subset of genes required for neurogenesis and their homology to myc.";
Cell 50:415-424(1987).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACTS_DROWE STANDARD; PRT; 201 AA.
P10083; Q9W5G4;
D1-MAR-1989 (Rel. 10, Created)
O1-MAR-1989 (Rel. 10, Last sequence update)
O1-MAR-1989 (Rel. 10, Last sequence update)
O1-MAR-1989 (Rel. 10, Last annotation update)
Achaete-scute complex protein T5 (Achaete).
AC OR T5 OR E6:125H10.3 OR CG3796.
Drosophila melanogaster (Fruit fly).
Eukaryota; Metazoa; Arthropoda; Mandibulata; Pancrustacea; Hexapoda; Insecta; Pterygota; Neoptera; Endopterygota; Diptera; Brachycera; Muscomorpha; Ephydroidea; Drosophila.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                      Drosophila adunca (Fruit fly).
Eukaryota; Metazoa; Arthropoda; Mandibulata; Pancrustacea; Hexapoda;
Insecta; Pterygota; Neoptera; Endopterygota; Diptera; Brachycera;
Muscomorpha; Ephydroidea; Drosophilldae; Drosophila.
NCBI_TaxID-46893;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FlyBase; FBgn0024132; Dadu\hb.
Developmental protein; Gap protein; Zinc-finger;
Metal-binding; DNA-binding; Repeat; Nuclear protein.
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16-ocT-2001 (Rel. 40, Last annotation update) Hunchback protein (Fragments).
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100.0%; Pred. No. 0.2
iive 0; Mismatches
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POLY-GLN.
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EMBL; U92999; AAC03246.1;
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RAMEDINIPEREREINGN. A. STRAIN-BERKELRY RA MEDLINI-STRY WRAIN-BERKELRY RA MAGNET S. E. 11 P.W. Hoskins R.A. Galle R.F. Adams M.D. (Celniker S.E. 11 P.W. Hoskins R.A., Galle R.F. Adams M.D. (Celniker S.E., II) P.W. Hoskins R.A., Galle R.F. RA George R.A. Lewis S.E. Richards S.A. Ashburner M. Henderson S.N. RA Brandon R.C. Rogers Y.-H.C., Blazel R.C. Champe M., Pfelifer B.D. RA Briandon R.C. Rogers Y.-H.C., Blazel R.C. Champe M., Pfelifer B.D., Ra Abrill S.F. Agbapani A. An H. J. Andrews-Ffannkoch C., Baldwin D. RA Ballew R.M. Basu A. Baxendale J. Bayraktarolyl L., Beasley E.M. RA Ballew R.M. Basu A. Baxendale J. Bayraktarolyl L., Beasley E.M. RA Ballew R.M. Basu A. Baxendale J. Bayraktarolyl L., Beasley E.M. RA Ballew R.M. Box W. Buller H. Cadleu E., Center A., Chandra I. R. Cherry J.M. Cawley S., Daule C., Davenport L.B., Davies P., Burtis K.C., Busam D.A., Buller H. Cadleu E., Center A., Chandra I. R. Cherry J.M. Cawley S., Davies P., Deniz C., Ferrac C., Ferrac S., Dunkov B.C., Dunn P., Rosler C., Cabrielian A.E., Garg N.S., Gelbart W.M., Glasser K., R. Hostin M.J., Prangelista C., Ferrac C., Ferrac S., Dunkov B.C., Dun P., Hostin M.L. Harvey D., Helman T.J., Hernandez J.R., Houck J., Houck J., Houck M. Hostin B., Houten C., Mortis S., Mays A.D., Deniz J., Houston M.A., Howland T.J., Wei M.H., Glasser R., Hastin M., Mallsh E., Kadler C.D., Kraft C., Kravitz S., Kulp D., Lai X., Lasko P., Lei Y., Lewitsky A.A., Howland T.J., Weinerson D., Horkow M. Mullshina N.V. Wobarry C., Mortis J., Moshrefi A., Merkloy G., Mullshina N.V. Wobarry C., Mortis J., Moshrefi A., R. Houtes B.C., Stden-Kiamos I., Simpson M., Stupski M.P., San D. A., Shue B.C., Stden-Kiamos I., Simpson M., Stupski M.P., San D. A., Stutz S., Petelson M., Stupski M.P., San D. A., Stutz S., Petelson M., Stupski M., Wargs S., Yao O.A., R. A., Walley S., Walley S., Who D., Stuty S., Shu D., Shu N., Shu H., Shu R., Woodege T., Worley K., Zhu S., Shu N., Shu H., Shu R., Woodege T., Worley K., Zhu S., Shu N., Shu H., Shu R., Woodes E., Stockeller M., Shu S.
                                                           Benos P.V. Gatt M.K., Asburner M., Murphy L., Harris D.,
Barrell B.G., Ferraz C., Vidal S., Brun C., Demailles J., Cadieu E.,
Dreano S., Gloux S., Lelaure V., Mottler S., Galibert F., Borkova D.,
Minana B., Kafatos F.C., Louis C., Siden-Kiamos I., Bolshakov S.,
Papagiannahis G., Spanos L., Cox S., Madueno E., de Pablos B.,
Beinert J., Peter A., Schoettler P., Werner M., Mourkioti F.,
Callister D.M., Campbell L.A., Jaeckle H., Buchetson N.S.,
McMillan P.J., Salles C., Tait E.A., Valenti P., Saunders R.D.C.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TISSUE SPECIFICITY: L(1)SC, SC AND AC STRONGLY LABEL THE PRESUMPTIVE STOWATOGASTRIC NERVOUS SYSTEM, WHILE ASE IS MORE PROMINENT IN THE PRESUMPTIVE PROCEPHALIC LOBE.
SIMILARITY: BELONGS TO THE BASIC HELIX-LOOP-HELIX (BHLH) FAMILY OF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CENTRAL NERVOUS SYSTEM.
SUBUNIT: EFFICIENT DNA BINDING REQUIRES DIMERIZATION WITH ANOTHER
                                                                                                                                                                                                                                                                              From sequence to chromosome: the tip of the X chromosome of D.
                      STRAIN-Oregon-R;
MEDLINE-20196011; PubMed-10731137;
                                                                                                                                                                                                                                                                                                                       Science 287:2220-2222(2000).
                                                                                                                                                                                                                                                                                                                                              [3]
SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                     melanogaster.
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(See http://www.isb-sib.ch/announce/
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RY MEDLINE-96342529; PubMed-8746464;

RA MASIT L., Reid S.W.;

Nuclectide sequence of exons 5 to 9 of the p53 tumour-suppressor

RT gene of the donkey (Equus asinus).";

"Nuclectide sequence of exons 5 to 9 of the p53 tumour-suppressor

RT gene of the donkey (Equus asinus).";

LDA Seq. 6:61-63(1995).

-1- FUNCTION: Acts as a tumor suppressor in many tumor types; induces

CC growth arrest or apoptosis depending on the physiological

circumstances and cell type. Involved in cell cycle regulation as

circumstances and cell type. Involved in cell division

cc a trans-activator that acts to negatively regulate cell division

the activated genes is an inhibitor of cyclin-dependent kinases.

CC Apoptosis induction seems to be mediated either by stimulation of

CC Apoptosis induction seems to be mediated either by stimulation of

CC EXPRESSION (By similarity).

CC -1- SUBGELLUIAR LOCATION: Nuclear.

CC -1- SUBGELLUIAR LOCATION: Nuclear.

CC -1- DISEASE: P53 IS FOUND IN INCREASED AMOUNTS IN A WIDE VARIETY

CC -1- DISEASE: P53 IS FOUND IN INCREASED AMOUNTS IN A WIDE VARIETY

CC -1- CINTADITY TYPES OF CANCER.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the Buropean Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                   BASIC DOMAIN.
HELIX-LOOP-HELIX MOTIF (BY SIMILARITY).
AAA906600CA764C0 CRC64;
                                                                                                                                                                                                                                                 PROSITE; PS00038; HLH_1; 1. PROSITE; PS50888; HLH_2; 1. Neurogenesis; Differentiation; Developmental protein; DNA-binding.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Būkaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Butheria; Perissodactyla; Equidae; Equus.
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01-NOV-1997 (Rel. 35, Last Sequence update)
15-JUM-2002 (Rel. 41, Last annotation update)
Cellular tumor antigen p53 (Tumor suppressor p53) (Fragment).
                                                                                                                                                                                                                                                                                                                                                                                                     Length 201;
                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
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          statement is not removed.
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0; Mismatches
modified and this statement is not remove
entities requires a license agreement (Se
or send an email to license@isb-sib.ch).
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                                                                                                                                                    TRANSFAC; T00005; -...
FlyBase: FBGN000022; ac.
InterPro; IPR001092; HLH_basic.
Pfam: PF00010; HLH; 1.
SMART; SM00353; HLH; 1.
                                                                                              EMBL; AL023873; CAA19641.1;
EMBL; AE003417; AAF45498.1;
PIR; A43731; A43731
TRANSFAC; T00005;
                                                                                                                                                                                                                                                                                                                                                    201 AA; 22753 MW;
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                                                                              EMBL; M17120; AAA28312.1;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              115 QQQQQHQHL 123
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                                                                                                                                                                                                                                                                                                                                                                                                           Similarity 9; Conserv
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029480:
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Best Local S
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P53_SPEBE
064662;
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SEQUENCE
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CONFLICT
CONFLICT
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Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            "Nuclectide sequence of exons 5 to 9 of the p53 tumour-suppressor

"Thuclectide sequence of exons 5 to 9 of the p53 tumour-suppressor

"Thuclectide sequence of exons 5 to 9 of the p53 tumour-suppressor

"The seq. (185-187(1996).

"The seq. (185-187(1996).

"The seq. (185-187(1996).

"The activated genes and cell type. Involved in cell cycle regulation as a trans-activator that acts to negatively regulate cell division

"The activated genes is an inhibitor of cyclin-dependent kinases.

"The activated genes is an inhibitor of cyclin-dependent kinases.

"The activated genes is an inhibitor of cyclin-dependent kinases.

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"The activated genes is an inhibitor of cyclin-dependent kinases."
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                                                                                                                                             BY SIMILARITY.
OLIGOMERIZATION.
NUCLEAR LOCALIZATION SIGNAL (POTENTIAL).
                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DISEASE: P53 IS FOUND IN INCREASED AMOUNTS IN A WIDE VARIETY OF TRANSFORMED CELLS. P53 IS FREQUENTLY MUTATED OR INACTIVATED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Perissodactyla; Equidae; Equus.
NCBI_TaxID=9796;
                                                        Probom; P0002681; P53; 1.
PROSITE; PS00348; P53; 1.
Anti-oncogene; DNA-binding; Transcription regulation; Activator; Nuclear Protein; Phosphorylation; Apoptosis.
                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                    P53_HORSE STANDARD; PRT; 280 AA.
P79892; Q29481;
01-NOV-1997 (Rel. 35, Created)
15-JUN-2002 (Rel. 35, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
Cellular tumor antigen p53 (Tumor suppressor p53) (Fragment).
                                                                                                                                                                                                                                                Length 207;
                                                                                                                                                                                                                                                                                0; Indels
                                                                                                                                                                                                               973EBD85910B498E CRC64;
                                                                                                                                                                                                                                                DB 1; 1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Nuclear.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE OF 76-280 FROM N.A. MEDLINE-96293865; PubMed-8722575; Nasir L., Reid S.W.;
                                                                                                                                                                                                                  ..
Σ
                                                                                                                                                                                                                                                               100.08;
                                                                                                                                                                                                                                                2.0%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE OF 1-263 FROM N.A.
                                                                                                                                                                                                                  23428
EMBL; U26741; AAB41265.1;
                               InterPro; IPR002117; P53.
Pfam; PF00870; P53; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SUBCELLULAR LOCATION:
                                                                                                                                                                                                                                                             Local Similarity 100.
nes 9; Conservative
                                                                                                                                                 168
>207
199
                                                                                                                                                                                                                                                                                                                 265 YNFMCNSSC 273
                                                                                                                                                                                                                                                                                                                                    110 YNFMCNSSC 118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Equus caballus (Horse)
                                                                                                                                                              201 >2
187 1
207 2
207 AA;
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                 HSSP; P04637;
                                                                                                                                               DNA_BIND
DOMAIN
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SEQUENCE
                                                                                                                                                                                                                                                 Query Match
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Matches
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P53_HORSE
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   (See http://www.isb-sib.ch/announce/
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-I-FUNCTION: Acts as a tumor suppressor in many tumor types; induces growth arrest or apoptosis depending on the physiological circumstances and cell type. Involved in cell cycle regulation as a trans-activator that acts to negatively regulate cell division by controlling a set of genes required for this process. One of the activated genes is an inhibitor of cyclin dependent kinases. Apoptosis induction seems to be mediated either by stimulation of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NUCLEAR LOCALIZATION SIGNAL (POTENTIAL).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
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SUBCELLULAR LOCATION: Nuclear.
DISEASE: P53 IS FOUND IN INCREASED AMOUNTS IN A WIDE VARIETY
OF TRANSFORMED CELLS. P53 IS FREQUENTLY MUTATED OR INACTIVATED
IN MANY TYPES OF CANCER.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Spermophilus beecheyi (Beechey ground squirrel).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Sciuridae; Sciurinae;
                                                                                                                                                                                                                                                                                                               Transcription regulation; Activator;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Rivkina M.B., Cullen J.M., Robinson W.S., Marion P.L.; "State of the p53 gene in hepatocellular carcinomas of ground squirrels and woodchucks with past and ongoing infection with hepadnaviruses.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BAX and FAS antigen expression, or by repression of Bcl-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    01-NOV-1997 (Rel. 35, Created)
01-NOV-1997 (Rel. 35, Last sequence update)
15-UTN-2002 (Rel. 41, Last annotation update)
Cellular tumor antigen p53 (Tumor suppressor p53) (Fragment).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DB 1; Length 280; .0.32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            30985 MW; 040F12030B5ACEE9 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  I -> A (IN REF. 2).

L -> M (IN REF. 2).

A -> V (IN REF. 2).

G -> A (IN REF. 2).
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                                                                                                                                                                                                                                                                                                                                                                                                          BY SIMILARITY.
OLIGOMERIZATION
                                                                                                                                                                                                                                                                                                        Anti-oncogene; DNA-binding; Transcription re
Nuclear protein; Phosphorylation; Apoptosis.
NON_TER 1 1 1
NON_TER 2 243 BY SIMILARITY.
DOMAIN 276 >280 OLIGOMERIZATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          314 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2.0%; Score 9; DB 1
llarity 100.0%; Pred. No. 0.3
Conservative 0; Mismatches
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entities requires a license agreement ( or send an email to license@isb-sib.ch)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TISSUE-Thymus;
MEDLINE-95007566; PubMed-7923176;
                                                                                        EMBL; S83123; AAB46899.1; -. EMBL; U37120; AAB18936.1; -.
                                                                                                                                                                                                                ProDom; PE00870; P53; 1.
ProDom; PD002681; P53; 1.
PROSITE; PS00348; P53; 1.
                                                                                                                                                                                   InterPro; IPR002117; P53.
Pfam; PF00870; P53; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         265 YNFMCNSSC 273
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             185 YNFMCNSSC 193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        280 AA;
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tes 9; Conserv
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us-09-670-568b-1.oli.rsp

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(without alignments)
2266.748 Million cell updates/sec
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1 MSGSTQTNEFLSPEVFQHIW.....PKQSDVFFRHSKPPNRSVYP 448
                                                                                                         June 24, 2003, 22:25:12; Search time 19 Seconds
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GenCore version 5.1.6
Copyright (c) 1993 - 2003 Compugen Ltd.
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                                                                       OM protein - protein search, using sw model
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Gapop 60.0 , Gapext 60.0
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1: pir1:*
2: pir2:*
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4: pir4:*
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Perfect score:
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed and is derived by analysis of the total score distribution.

	Description	lar tumor	cellular tumor ant	tumor suppressor p	cellular tumor ant	Achaete-scute comp	u	cellular tumor ant	cellular tumor ant	cellular tumor ant	cellular tumor ant	tumor suppressor p	cellular tumor ant	cellular tumor ant	transcription fact	homeotic protein L	homeotic protein L	dorsal protein - f	ataxin-1 - human	hypothetical prote	protein kinase - s	transcription acti	regulator protein	ecdysone-induced p	eye development pr	spore protein gamm	cellular tumor ant	hypothetical prote	cell division cont	probable RAV2-like
SUMMARIES	QI	S02193	JH0631	JC6176	JH0633	A43731	A29376	S38824	S51648	DNMS53	S02192	JC6193	DNHU53	506594	A56346	A30168	S01164	A30350	S46268	G86325	S49313	T18235	S69206	B34598	A56158	JU0155	I46226	T25670	ρq.	F84776
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	Query Match Length		396	393	386	201	363	381	386	390	391	391	393	393	481	629	635	678	816	1062	1094	1145	1154	1394	1893	54	77	107	150	158
do	Query		٠	•	2.2		٠	2.0	•	5.0	5.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	7.0	2.0	2.0	7.0	2.0	2.0		1.8	1.8	1.8	1.8
	Score	13	13	10	10	σ	9	6	6	σ	6	6	σ	6	6	6	6	6	6	6	6	6	6	6	σ	89	8	80	80	ω
	Result No.	1	7	m	4	S	9	. 7	80	σ	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	56	27	28	29

C;Comment: This protein is the product of a tumor suppressor gene, p53, whose inactive; C;Comment: This protein is the product of a tumor antigen p53
C;Superfamily: cellular tumor antigen p53
C;Seywords: apoptosis; cell division control; DNA binding; homotetramer; nucleus; pho F;164,167,227,231,Einding site: zinc (Cys, His, Cys, Cys) *status predicted
F;395/Binding site: phosphoryl-RNA (Ser) (covalent) *status predicted

2.9%; Score 13; DB 1; Length 396; 100.0%; Pred. No. 6.4e-05;

Query Match Best Local Similarity

cellular tumor antigen p53 - rainbow trout
C; Species: Oncorhynchus mykiss (rainbow trout)
C; Species: Oncorhynchus mykiss (rainbow trout)
C; Species: Oncorhynchus mykiss (rainbow trout)
C; Accession: JH0631
R; de Fromentel, C.C.; Pakdel, F.; Chapus, A.; Baney, C.; May, P.; Soussi, T. Gene 112, 241-245, 1992
A; Title: Rainbow trout p53: CDNA cloning and biochemical characterization.
A; Reference number: JH0631; MUID:92210006; PMID:1339362
A; Reference number: JH0631
A; Molecule type: mRNA
A; Residues: 1-396 < CDEF>
A; Residues: 1-396 < CDEF>
A; Cross-references: GB:M75145; NID:9213828; PIDN:AAA49605.1; PID:9213829
A; Experimental source: liver

8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8			173 173 191 191 191 191 224 264 265 267 330 330	000000000000000	150482 A47303 A47303 S233570 S23324 S61328 D46177 T24981 A60637 WMTMCV WMTMCV WMTMSH A48121 S30863 A35915 B49070 ALIGNMENTS	Vimentin Al - gold FTZ-F1 steroid rec sex-determining pr gene achaete prote hypothetical prote enhancer of split related to high cy hypothetical prote merozoite antigen 30K protein - cucu retrovirus-related BMH1 protein - yea heterogeneous nucl homeotic protein A ecdysone-inducible
RESULT 1 SO1933 SO1933 SO1933 SO1933 SO1933 SO1933 SO1933 SO1933 C.Species: Gallus gallus (chicken) C.Species: Gallus gallus (chicken) C.Date: 10-Sep-1999 #sequence_revision 10 C.Accession: S02193 R;Soussi, T.; Begue, A.; Kress, M.; Stehe Nucleic Acids Res. 16, 11383, 1988 A;Teference number: S02193 A;Reference number: S02193; MUID:89083584 A;Accession: S02193 A;Molecule type: mRNA A;Residues: 1-367 <s00> A;Cross-references: EMBL:X13057; NID:9637. C;Superfamily: cellular tumor antigen p53 C;Keywords: apoptosis; cell division cont. F;161,164,224,228/Binding site: zinc (Cyst)</s00>	umor antigen e names: nucl Gallus gallu	tigen: . nuc. 9 9 #19 9 9 #3 93 #2 0 0 16 0 16 0 16 0 16 0 17 0 17 0 17 0 17 0 17 0 17 0 17 0 17	igen p53 - chick nuclear oncopro gallus (chicken) 99 #sequence_revi 33	chic lcker lcker ss, h 198 of e MUID: cant livis	3 -Sep 11in, cod1 ; PM (cov,	-1999 #text_change 10-Sep-1999 D.; May, P. ng the chicken p53 nuclear oncoprotein. ID:3060861 PIDN:CAA31456.1; PID:g63741 DNA binding; homotetramer; nucleus; pho s, Cys, Cys) #status predicted alent) #status predicted
Query Match Best Local Matches 1	Simi 3;	similarity 3; Conser	vat	2.9%; 100.0%; ive	Score 13; DB 1; Length 367; Pred. No. 5.9e-05; 0; Mismatches 0; Indels	367; els 0; Gaps 0;
oy.	261 TTV] 216 TTV]	LYNF IIII LYNF	TTVLYNFMCNSSC 2	273		
RESULT 2						

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A29376
Cellular tumor antigen p53 - African clawed frog
C:Species: Xenopus laevis (African clawed frog
C:Species: Xenopus laevis (African clawed frog
C:Date: 10-Sep-1999 #sequence_revision 10-Sep-1999
C:Accession: A29376; S61531; S72313; I51639
C:Accession: A29376; S61531; S72313; I51639
C:Accession: A29376; Mainterial, M.; May, P.; Kress, M.
A:Title: Cloning and characterization of a cDNA from Xenopus laevis coding for a prot
A:Tecession: A29376; MuID:88143684; PMID:2830576
A:Totle: Cloning and characterization of a cDNA from Xenopus laevis coding for a prot
A:Totle: A29376; MuID:88143684; PMID:2830576
A:Residues: 1-53 <S0U-
A:Cross-references: EMEL:X05191; NID:964961; PIDN:CAA28821.1; PID:964962
A:Title: Overexpression of wild-type p53 interferes with normal development in Xenopu
A:Reference number: I51639; MuID:94134403; PMID:8302570
A:Title: Overexpression of wild-type p53 interferes with normal development in Xenopu
A:Reference number: I51639; MuID:94134403; PMID:8302570
A:Residues: 1-293,295-363 <HOE>
A:Cross-references: EMEL:X77546; NID:9468513; PIDN:CAA54672.1; PID:9468514
A:Residues: 1-51,'S','53-70,72-293,295-363 <HOW>
A:Residues: 1-51,'S','53-70,'72-293,295-363 <HOW>
A:Residues:
                              C;Species: Drosophila melanogaster
C;Date: 03-Mar-1993 #sequence_revision 03-Mar-1993 #text_change 21-Jul-2000
C;Accession. A43731
A;VIllares, R.; Cabrera, C.V.
Cell 50, 415-424, 1987
A;Title: The achaete-scute gene complex of Drosophila melanogaster: conserved domains A;Reference number: A43731
A;Reference number: A43731
A;Reference number: A43731
A;Residues: 1-201 <VIL>A;Residues: 1-201 <VIL>A;Residues: 1-201 <VIL>A;Residues: 1-201 <VIL>A;Residues: 1-201 <VIL>A;Cenerics: References: GB:M17120; NID:g156744; PIDN:AAA28312.1; PID:g156747
A;Cenerics: A;Cenerics: C;Generics: C;Generics: A;Cenerics: Diababinding
C;Reywords: DNA binding
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C; Keywords: apoptosis; cell division control; DNA binding; homotetramer; nucleus; pho
F;150,153,213,217/Binding site: zinc (Cys, His, Cys, Cys) #status predicted
F;362/Binding site: phosphoryl-RNA (Ser) (covalent) #status predicted
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100.0%; Pred. No. 0.76;
vative 0; Mismatches
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100.0%; Pred. No. 0.4
tive 0; Mismatches
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Best Local Similarity 100.0
Matches 9; Conservative
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les 9; Conservative
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219 GGMNRRPIL
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C;Species: Mesocricetus auratus (golden hamster)
C;Species: Mesocricetus auratus (golden hamster)
C;Species: Mesocricetus auratus (golden hamster)
C;Species: Nesocricetus auratus (golden hamster)
C;Saccession: JH0633
R;Legiros, Y.; McIntyre, P.; Soussi, T.
C;Accession: JH0633
R;Legiros, Y.; McIntyre, P.; Soussi, T.
A;Title: The CDNA cloning and immunological characterization of hamster p53.
A;Accession: JH0633; MUID:92210007; PMID:1555773
A;Accession: JH0633; MUID:92210007; PMID:1555773
A;Accession: JH0633
A;Acce
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A; Contents: liver
A; Contents: liver
A; Contents: liver
A; Morecasion: JC6176
A; Morecule type: mRNA
A; Residues: 1.393 < LLES
A; Cross references: GB: U50395; NID: 91842229; PIDN: AAC53040.1; PID: 91842230
C; Comment: This protein is a multimer, it plays the central role in a complex DNA damage c; Genetics:
C; Genetics: A; Gene: p53
C; Superfamily: cellular tumor antigen p53
C; Keywords: liver; tumor
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                                                                                                                                                                                                                                                                                                                  tumor suppressor protein p53 - Chinese hamster C.Species: Cricetulus griseus (Chinese hamster) C.Date: 11-Apr-1997 #sequence_revision 09-May-1997 #text_change 23-Jul-1999 C.Accession: JC6176
                                  Gaps
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Achaete-scute complex protein T5 - fruit fly (Drosophila melanogaster)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                      Rice, H.; Larner, J.M.; Hamlin, J.L. Gene 184, 177-183, 1997
Affithe: Cloning and characterization of Chinese hamster p53 cDNA. A; Reference number: JC6176; MUID:97183659; PMID:9031625
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0.077;
hes 0; Indels
                          Indels
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100.0%; Pred. No. 0.077;
tive 0; Mismatches 0; Indels
                          ö
               Mismatches
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100.0%; Pred. No. 0.0
tive 0; Mismatches
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               ó
                                                                       261 TTVLYNFMCNSSC 273
                                                                                                         219 TTVLYNFMCNSSC 231
   Conservative
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Best Local Similarity 100.0
Watches 10; Conservative
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276 RICACPGRDR 285
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Best Local Similarity
Matches 10; Conserv
   13;
Matches
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A; Cross-references: GB: X00876; NID: 9871420; PIDN: CAA25420.1; PID: 9871421; GB: X01237;
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A; Residues: 1-159, H',161-167, G',169-233, 'I',235-390 <2AK>
A; Cross-references: GB:X01237; GB:K01700; NID:953575
A; Cross-references: GB:X01237; GB:K01700; NID:953575
Mol. Cell. Biol. 6, 3232-3239, 1986
A; Title: Immunologically distinct p53 molecules generated by alternative splicing.
A; Reference number: S38822; MUID:87064640; PMID:3023970
                                                                                                                                                                                                                                                                                                                                                                         cellular tumor antigen p53 - mouse
N;Alternate names: oncoprotein p53
C;Species: Mus musculus (house mouse)
C;Date: 28-Aug-1985 #sequence_revision 04-Oct-1996 #text_change 11-May-2000
C;Accession: A22739; S06336; A2264; S38822; S38823; S40014; I48703
R;Bienz, B.; Zakut-Houri, R.; Givol, D.; Oren, M. A. 2179-2183, 1984
A;Title: Analysis of the gene coding for the murine cellular tumour antigen p53.
A;Reference number: A22739; MuID:85027173; PMID:6092064
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Bioorg. Khim. 13, 1691-1694, 1987
A; Fitle: Primary structure of DNA complementary to murine oncoprotein p53 mRNA.
A; Reference number: S06336; MUID:88221682; PMID:3329909
A; Accession: S06336
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A; Molecule type: mRNA
A; Residues: 1-134, V',136-390 <CHU>
R;Zakut-Houri, R.; Oren, M.; Bienz, B.; Lavie, V.; Hazum, S.; Givol, D.
Nature 306, 594-597, 1983
A;Title: A single gene and a pseudogene for the cellular tumour antigen p53.
A;Reference number: A02684; MUID:84068204; PMID:6646235
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A;Status: not compared with conceptual translation
    0.8;
                                         Mismatches
    Pred. No.
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A;Residues: 1-167,'G',169-390 <ARA3>
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100.08;
Best Local Similarity 100.
Matches 9; Conservative
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227 YNFMCNSSC 235
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Residues: 1-390 <ARA1>
                                                                                                              265 YNFMCNSSC
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A; Molecule Type: MRNA
A; Accession: $38824
A; Molecule Type: MRNA
A; Mesidues: 1-38 (ARA)
A; Molecule Type: MRNA
A; Mesidues: 1-38 (ARA)
A; Midesa-Martin, M.F.
B; Mullies Acids Res. 20, 1979-1981, 1992
A; Title: Alternatively spiliced p35 MRA in transformed and normal cells of different tiss A; Midesa-Martin, MID: 9253421; PMID: 1579500
A; Maccession: S33478; MUID: 9253421; PMID: 1579500
A; Mesidues: 1381 (ARA)
A; Molecule type: MRNA
A; Mesidues: 1381 (ARA)
A; Molecule type: MRNA
A; MNA
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N;Alternate names: tumor-suppressor protein p53
C;Species: Bos primigenius taurus (cattle)
C;Date: 10.Sep-1999 #sequence_revision 10.Sep-1999 #text_change 10.Sep-1999
C;Accession: S51648
R;Dequidedt, F:, Willems, L.; Burny, A.; Kettmann, R.
Submitted to the EMBL Data Library, September 1994
A;Description: Nucleotide sequence of the ovine p53 tumor-suppressor gene cDNA and its q
A;Recence number: S51648
A;Status: preliminary
A;Accession: S51648
A;Status: preliminary
A;Residues: 1-386 ADEO
A;Cross-references: EMBL:X81704; NID:g602332; PIDN:CAA57348.1; PID:g602333
C;Keywords: apoptosis; cell division control; DNA binding; homotetramer: phosphoprotein;
F;168,171,231,235/Binding site: Zinc (Cys, His, Cys, Cys) #status predicted
F;385/Binding site: phosphoryl-RNA (Ser) (covalent) #status predicted
                            C; Species: Mus musculus (house mouse)
C; Date: 13-7an-1995 #sequence_revision 13-7an-1995 #text_change 23-Jul-1999
C; Accession: S38624; S35478
R; Arai, N.; Nomura, D.; Yokota, K.; Wolf, D.; Brill, E.; Shohat, O.; Rotter, V. Mol. Cell. Biol. 6, 3222-3239, 1986
A; Fitle: Immunologically distinct p53 molecules generated by alternative splicing. A; Reference number: S38822; MUID:87064640; PMID:3023970
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
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cellular tumor antigen p53, minor splice form - mouse
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100.0%; Pred. No. 0.79;
tive 0; Mismatches
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A; Residues: 1-47, RT, 49-78, 'QW', 82-390 <RES>
A; Cross-references: EMBL:X00741; NID:953570; PIDN:CAA25323.1; PID:953571
C; Comment: This DNA-binding protein plays an essential role in the regulation of cell C; Comment: The tetramer association region may exhibit a beta-turn, beta-sheet, beta-C; Superfamily: cellular tumor antigen p53
C; Superfamily: cellular tumor antigen p53
C; Keywords: apoptosis; cell division control; DNA binding; homotetramer; phosphoprote F; 1-44/Domain: transcription activation **status predicted <TRA>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A;Cross-references: EMBL:M13873; NID:g200200; PIDN:AAA39882.1; PID:g200201
R;Jenkins, J.R.; Rudge, K.; Redmond, S.; Wade-Evans, A.
Nucleic Acids Res. 12, 5609-5626, 1984
A;Title: Cloning and expression analysis of full length mouse cDNA sequences encoding A;Reference number: 148703; MUID:84272240; PMID:6379601
                                                                                                                                                                                                             A;Cross-references: EMBL:M13873
R;Arai, N.; Nomura, D.; Yokota, K.; Wolf, D.; Brill, E.; Shohat, O.; Rotter, V. submitted to the EMBL Data Library, July 1988
A;Reference number: $40014
A, Cross-references: EMBL:M13872; NID:9200198; PIDN:AAA39881.1; PID:9200199
                                                                                                      A;Molecule type: mRNA
A;Residues: 1-167,'G',169-233,'I',235-390 <ARA2>
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A;Title: cDNA cloning and immunological characterization of rabbit p53.
A;Reference number: JC6193; MUID:97208869; PMID:9055811
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N.Alternate names: gene p53 protein; nuclear oncoprotein p53
Collular tumor antigen p53 - rat
C.Species: Ratius norvegicus (Norway rat)
C.Species: Ratius norvegicus
C.Species: Ratius
C.C.; Brenden: C.C.; Brendfor, C.C.; May, E.
N. Mouleoride Res. 16, 11384, 1988
A.Fitle: Nucleoride sequence of a CDNA encoding the rat p53 nuclear oncoprotein.
A.Accession: S03192; MUID:89083565; PMID:360862
A.Moleoride type: mRNA
A.Residues: 1-391 cSOD
A.Moleoride type: mRNA
A.Residues: 1-317, 1939
A.Fitle: Structure of the rat p53 tumor suppressor gene.
A.Fitle: Structure of the rat p53 tumor suppressor gene.
A.Reference number: S41149; MUID:93181268; PMID:8441660
A.Status: preliminary; nucleic acid sequence not shown; translation not shown
A.Residues: 1-173, WW, 175-391 cMUL>
A.Koss-references: EMBL:107909
A.Status: preliminary; nucleic acid sequence not shown; translation not shown
A.Residues: 1-173, WW, 175-391 cMUL>
A.Koss-references: EMBL:107909
A.Note: the nucleotide sequence was submitted to the EMBL Data Library, December 1992
C.Senetics:
A.Introns: 25/2; 32/3; 123/3; 185/1; 259/2; 305/1; 329/3; 365/2
C.Superfamily: cellular tumor antigen p53
C.Senetics:
C.Superfamily: cellular tumor antigen p53
C.Senetics:
C.Superfamily: cellular tumor antigen p53
C.Senetics:
C.Superfamily: Cellular tumor antigen p53
C.Severics apoptocals cell division control; DNA binding; homotetramer; nucleus predicted
E.350/Binding site: phosphoryl-RNA (Ser) (covalent) #status predicted
F;99-289/Domain: DNA-binding core #status predicted <DBC>
F;108-121/Region: L1 loop
F;114-139/Region: conserved region II
F;160-122/Region: L2 loop
F;160-122/Region: conserved region II
F;163-1248/Region: conserved region IV
F;231-252/Region: conserved region IV
F;231-252/Region: conserved region IV
F;231-252/Region: uclear location of F;313-319/Region: uclear location signal
F;79,12,12,12,12,137/Binding site: phosphate (Ser) (covalent) #status predicted
F;173,176,235,239/Binding site: phosphate (Ser) (covalent) #status predicted
F;312/Binding site: phosphate (Ser) (covalent) #status predicted
F;389/Binding site: phosphate (Ser) (covalent) #status predicted
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C:Species: Oryctolagus cuniculus (domestic rabbit)
C:Bate: 11-Apr-1997 #sequence_revision 09-May-1997 #text_change 20-Jun-2000
C:Accession: JCG193
R:Le Goas, F:: May, P:: Ronco, P:; de Fromentel, C.C.
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No. 0.81; 0; Indels
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100.0%; Pred. No. 0.81;
tive 0; Mismatches
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Best Local Similarity 100.0%; Pred. No. 0.8
Matches 9; Conservative 0; Mismatches
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242 GGMNRRPIL 250
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A; Molecule type: DNA
A; Molecule type: DNA
A; Molecule type: DNA
A; Residues: 1-393 <LAM>
A; Accession: A£2.22,
BBCDMAN, V.L.; Chumakov, P.M.; Ninkina, N.N.; Samarina, O.P.; Georgiev, G.P.
R; Buchman, V.L.; Chumakov, P.M.; Ninkina, N.N.; Samarina, O.P.; Georgiev, G.P.
B; Buchman, Y.L.; Chumakov, P.M.; Ninkina, N.N.; Samarina, O.P.; Georgiev, G.P.
A; Title: A variation in the structure of the protein-coding region of the human p53 g
A; Title: A variation in the structure of the protein-coding region of the human p53 g
A; Molecule type: DNA
A; M
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           cellular tumor antigen p53 [validated] - human
N'Alternate names: cellular phosphoprotein p53; oncoprotein p53; transformation suppr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            C; Species: Homo sapiens (man)
C; Date: 05-oct-1988 #sequence_revision 18-Nov-1994 #text_change 15-Sep-2000
C; Accession: A25224; A43073; JT0436; S40773; S42669; A22837; A55060; A25397; B25397, B7. Lamb, P.; Crawford, L.
Nol. Cell. Biol. 6, 1379-1385, 1986
A; Title: Characterization of the human p53 gene.
A; Title: Characterization of the human p53 gene.
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A; Residues: 1-71, 'p',73-393 <ZAK>
A; Cross-references: EMBL:X02469; EMBL:M60950; NID:935209; PIDN:CAA26306.1; PID:935210
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A Molecule type: mRNA
A;Residues: 1-391 <LEA>
A;Cross-references: EMBL:X90592; NID:91532043; PIDN:CAA62216.1; PID:91532044
C;Genetics:
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A.Residues: 101-393 <MKI1>
A.Residues: 101-393 <MKI1>
A.Cross-references: EMBL:X01405; NID:935215; PIDN:CAA25652.1; PID:9642241
R.Zakut-Houri, R.; Bienz-Tadmor, B.; Givol, D.; Oren, M.
EMBO J. 4, 1251-1255, 1985
A.Fitle: Human p53 cellular tumor antigen: cDNA sequence and expression in
A.Reference number: A22837; MUID:85230577; PMID:4006916
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100.0%; Pred. No. 0.8
ative 0; Mismatches
                                                                                                                                                              A;Gene: p53
C;Superfamily: cellular tumor antigen p53
C;Keywords: tumor
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Best Local Similarity 100.
Matches 9; Conservative
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A; Accession: I38089
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A Mocecule type: mRNA

A Residues: 1-17, 73-272, H., 274-393 cHRP>
A CCOSS-references: GB:R01399, NID:9189478; PIDN:AAA59989.1; PID:9189479
A CCOSS-references: GB:R01399, NID:9189478; PIDN:AAA59989.1; PID:9189479
A CCOSS-references: GB:R01399, NID:9180478; PID:R0111, Molf, D.; Arai, N.; Retter, V.
B A FRAFficher Labola. Carbon pRR-2, cell line A31
A Reference number: A93086, NUD:87089826; PMID:3025664
A 77141e: Molecular basis for heterogeneity of the human p53 protein.
A Accession: A55397
A Reference number: A93086, NUD:87089826; PMID:3025664
A 77141e: Molecular basis for heterogeneity of the human p53 protein.
A Accession: A53397
A Residues: 1-78, T' 80-393 cHRA!>
A Residues: 1-78, T' 780-393 cHRA!>
A Residues: 1-78, T' 780-73-78, T' 780-79, T' 780-79,
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R;Harlow, E.; Williamson, N.M.; Ralston, R.; Helfman, D.M.; Adams, T.E.
Mol. Cell. Biol. 5, 1601-1610, 1985
A;Title: Molecular cloning and in vitro expression of a cDNA clone for human cellular
A;Reference number: A55060; MUID:85267676; PMID:3894933
A;Accession: A55060
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A; Residues: EMBL:X60015; NID:g506442; PIDN:CAA42630.1; PID:g506443
A; Accession: 138088
A; Status: translated from GB/EMBL/DDBJ
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Residues: 1-245,'T',247-393 <F04>
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A; Accession: translated from GB/EMBL/DDBJ
A; Molecule type: DNA
A; Molecule type: DNA
A; Residues: 1-393 <FUNA
A; Residues: 1-393 <FUNA
A; Cross-references: EMBL:X54156; NID:935213; PIDN:CAA38095.1; PID:935214
B; Yamada, Y.; Yoshida, T.; Hayashi, K.; Sekiya, T.; Yokota, J.; Hirohashi, S.; Nakata
Cancer Res. 51, 5800-5805, 1991
A; Title: p53 gene mutations in gastric cancer metastases and in gastric cancer cell 1
A; Reference number: A44905; MUID:92034678; PMID:1933850
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A; Residues: 246-247, 'W', 249-250. < YAM>
A; Residues: 246-247, 'W', 249-250. < YAM>
A; Cross-references: GB: S63157; NID: 9237829; PIDN: AAB20140.1; PID: 9237830
A; Cross-references cxtracted from NUBI backbone (NCBIN: 63157, NCBIP: 63158)
A; Note: mutation from a liver metastasis of a gastric cancer
B; Hensel, C. H.; Xiang, R. H.; Sakaguchi, A.Y.; Naylor, S.L.
Oncogene 6, 1067-1071, 1991
A; Title: Use of the single strand conformation polymorphism technique and PCR to dete
A; Reference number: 158354; MUID: 91296386; PMID: 1648702
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A; Molecule type: DNA
A; Molecule type: DNA
A; Residues: 274-277, 'S', 279-282 <HEN2>
A; Residues: 274-277, 'S', 279-282 <HEN2>
A; Cross-references: GB: S41977; NID: 91679932; PIDN: AAB19325.1; PID: 9232816
R; Chow, V.T.; Quek, H.H.; Tock, E.P.C.
Cancer Lett. 73, 141-148, 1993
A; Title: Alternative splicing of the p53 tumor suppressor gene in the Molt-4 T-lympho
A; Reference number: 152681; MUID: 94036762; PMID: 9221626
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A; Residues: 327-331, 'DQTSFQKENC' <CHO>
A; Residues: 327-331, 'DQTSFQKENC' <CHO>
A; Cross-references: GB.566666; NID:q436292; PIDN:AAB28601.1; PID:g436293
A; Cross-references: GB.566666; NID:q436292; PIDN:AAB28601.1; PID:g436293
A; Note: mutant sequence with altered splicing and termination expressed in Molt-4 T-1
B; Petersen, G.; Song, D.; Huegle-Doerr, B.; Oldenburg, I.; Bautz, E.K.F.
Mol. Gen. Genet. 249, 425-431, 1995
A; Title: Mapping of linear epitopes recognized by monoclonal antibodies with gene-fra
A; Reference number: 560151; MUID:96133682; PMID:8552047
A; Molecule type: DNA
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A; Residues: 1-253, 'D', 255-393 <F11>
A; Cross-references: BMBL: X60020; NID: 9506452; PIDN: CAA42635.1; PID: 9506453
A; Note: all sequences submitted to the EMBL/GenBank/DDBJ databases June 1991
R; Futreal, P.A.; Barrett, J.C.; Wiseman, R.W.
Nucleic Acids Res. 19, 6977, 1991
A; Title: An Alu polymorphism intragenic to the TP53 gene.
A; Reference number: 138093; MUID: 92107726; PMID: 1762941
A;Molecule type: mRNA
A;Residues: 1-71,'P',73-237,'Y',239-393 <F07>
A;Cross-references: EMBL:X60016; NID:9506444; PIDN:CAA42631.1; PID:9506445
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A;Residues: 1-247,'Q',249-393 <F08>
A;Cross-references: EMBL:X60017; NID:g506446; PIDN:CAA42632.1; PID:g506447
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A; Residues: 1-71, P', 73-162, H', 164-393 <F09>
A; Cross-references: EMBL:X60018; NID:q506448; PIDN:CAA42633.1; PID:g506449
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A;Status: translated from GB/EMBL/DDBJ
A;Residues: 1-212, 'Q', 214-393 <F10>
A;Residues: 1-212, 'Q', 214-393 <F10>
A;Cross-references: EMBL:X60019; NID:g506450; PIDN:CAA42634.1; PID:g506451
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A;Molecule type: DNA
A;Residues: 244-247, W',249-252 <HENI>
A;Cross-references: GB:S41969; NID:g1679931; PIDN:AAB19324.1; PID:g232814
A;Accession: I78850
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C;Species: Drosophila sp.
C;Date: 07-Sep-1990 #text_change 17-Nov-2000
C;Date: 07-Sep-1990 #sequence_revision 07-Sep-1990 #text_change 17-Nov-2000
C;Accession: A30168; A34149
R;Diederich, R.J.; Merill, V.K.L.; Pultz, M.A.; Kaufman, T.C.
Genes Dev. 3, 399-414, 1989
A;Fille: Isolation, structure, and expression of Labial, a homeotic gene of the anten
A;Reference number: A30168; MUID:89252817; PMID:2566560
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A; Residues: 1-629 <DIE>
R; Hogy, T; Doyle, H.J.; Harding, K.; Wedeen, C.; Levine, M.
R; Hogy, T.; Doyle, H.J.; Harding, K.; Wedeen, C.; Levine, M.
Proc. Natl. Acad. Sci. U.S.A. 83, 4809-4813, 1886
A; Title: Homeo box gene expression in anterior and posterior regions of the Drosophil A; Reference number: A24149; MUID:86259687; PMID:3014511
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C;Superfamily: unassigned homeobox proteins; homeobox homology
C;Keywords: DNA binding; homeobox; nucleus; transcription regulation
F;502-558/Domain: homeobox homology <HOX>
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                                                                                                                  - fruit fly (Drosophila sp.)
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Residues: 501-561 <HOE>
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A;Residues: 3-44 <PET>
R;Dang, C.V.; Lee, W.M.F.
J: Biol. Chem. 264, 18019-18023, 1989
A;Title: Nuclear and nucleolar targeting sequences of c-erb-A, c-myb, N-myc, p53, HSP70,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  cellular tumor antigen p53 - green monkey
cispecies: Cercopithecus aethiops (green monkey, grivet)
Cispecies: Cercopithecus aethiops (green monkey, grivet)
Cispecies: 10-Sep-1999 #sequence_revision 10-Sep-1999 #text_change 10-Sep-1999
Cispeciession: S06594
Nocleic Acids Res. 17, 8375, 1989
A:Title: Nucleotide sequence of a cDNA encoding the monkey cellular phosphoprotein p53.
A:Reference number: S06594; MUID:90045967; PMID:2530498
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C; Superfamily: cellular tumor antigen p53
C; Keywords: apoptosis; cell division control; DNA binding; homotetramer; nucleus; phosph F; 176,179,238,242/Binding site: zinc (Cys, His, Cys, Cys) #status predicted
F; 392/Binding site: phosphoryl-RNA (Ser) (covalent) #status predicted
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C;Date: 03-Oct-1995 #sequence_revision 03-Oct-1995 #text_change 03-Dec-1999
C;Accession: A56346
                                                                                                                                                                                                                                                                                                                                              Gaps
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                                                                                                                                                                                                                                             Length 393;
                                                                                                                                                                                                                                                                                                                             0; Indels
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2.0%; Score 9; DB 2; Length 481;
Best Local Similarity 100.0%; Pred. No. 0.97;
Matches 9; Conservative 0; Mismatches 0; Indels
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                                                                                                                                                                                                          Query Match 2.0%; Score 9; DB 1;
Best Local Similarity 100.0%; Pred. No. 0.82;
Matches 9; Conservative 0; Mismatches
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Best Local Similarity 100.0%; Pred. No. 0.82;
Matches 9; Conservative 0; Mismatches
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244 GGMNRRPIL 252
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244 GGMNRRPIL 252
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A; Residues: 1-393 <RIG>
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8, RESULT 15

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Gaps

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Gencore version 5.1.6

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OM protein - protein search, using sw model

Run on: June 24, 2003, 22:24:26; Search time 16 Seconds

(without alignments)

823.842 Million cell updates/sec

Title: US-09-670-568B-1

Perfect score: 448
Sequence: 1 MSGSTQTNEFLSPEVFQHIW.......PKQSDVFFRHSKPPNRSVYP 448
Scoring table: OLIGO
Gapop 60.0, Gapext 60.0
Searched: 262574 seqs, 29422922 residues
Word size: 0

Total number of hits satisfying chosen parameters: 262574
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Post-processing: Listing first 45 summaries

Database : Issued_Patents_AA:*
1: /cgn2_6/ptodata/1/laa/5A_COMB.pep:*
2: /cgn2_6/ptodata/1/laa/5A_COMB.pep:*

Minimum DB seq length: 0 Maximum DB seq length: 2000000000

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6: /cgn2_6/ptodata/1/1aa/PcrUS_COMB.pep;*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIE

0	-	% Query Match Tenath	2	SUMMARIES	
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44.8	100	448	4	-09-643-	Sequence 340, App
410		516	4	US-09-643-597-344	_
410		641	4	US-09-643-597-339	339,
410	91.5	680	4	-09-643-597-34	342,
341		461	4	US-09-643-597-343	343,
272		586	4	-09-643-597-3	338,
269	9	356	4	US-09-643-597-341	341,
191	42.6		4	US-09-643-597-152	152,
22	4.9	635	7	US-09-081-975-3	3, Ar
σ	2.0	7.1	4	US-09-146-054-9	6
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S	•	271	4	US-09-414-436-1	'n
σ		319	4	US-08-983-035A-42	42
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5	2.0	363	~		17,
5	2.0	363	7	US-08-697-221-18	18,

Sequence 21, Appl Sequence 22, Appl Sequence 24, Appl Sequence 26, Appl Sequence 26, Appl Sequence 27, Appl Sequence 15, Appl Sequence 15, Appl Sequence 3, Appl Sequence 25, Appl	Sequence 26, Appl Sequence 27, Appl Sequence 28, Appl
US-08-697-221-21 US-08-697-221-22 US-08-697-221-23 US-08-697-221-24 US-08-983-035A-28 US-08-983-035A-28 US-08-983-035A-36 US-08-983-035A-36 US-08-347-792-15 US-08-431-357-15 US-08-431-357-15 US-08-432-3 US-08-894-327-3 US-08-995-15353-15 US-08-995-15353-15 US-08-995-15353-15 US-08-995-15353-15	US-08-047-041A-26 US-08-047-041A-27 US-08-047-041A-28
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ALIGNMENTS

ESULT 1	
IS-09-643-597-340 Seguence 340, A	-09-643-597-340 Sequence 340, Application US/09643597
Patent No. 6426072 GENERAL INFORMATION	
APPLICANT:	Pongtong
APPLICANT: APPLICANT:	Kalos, Michael D.
APPLICANT:	a S.
APPLICANT:	Fanger, Gary R. O. C.
APPLICANT:	×
APPLICANT:	wang, Aljun Skeikv, Yasir A.W.
APPLICANT:	Henderson, Robert A.
APPLICANT:	Patricia D.
TITLE OF INVENTION:	NVENTION: COMPOSITIONS AND METHODS FOR THE INERARIANTED AND DIAGNOSIS OF LANG CANCER
FILE REFER	FILE REFERENCE: 210121.4550FT
CURRENT APPLICATION I	PLICATION NUMBER: US/09/643,597
NUMBER OF	NUMBER OF SEQ ID NOS: 369
SOFTWARE	SOEDWARD. FastSEQ for Windows Version 3.0
SEC ID NO 340	
TYPE: PRT	
ORGANISM: HOMO IS-09-643-597-340	Homo sapiens 1340
Ollery Match	
Best Local Similarity Matches 448; Conserv	100.0%; Pred. No. 0; vative 0; Mismatches 0;
λy 1	
ob 1	
λγ 61	
ob . 61	DSDLSDPMWPQYTNLGLLNSMDQQIQNGSSSTSPYNTDHAQNSVTAPSPYAQPSSTFDAL 120
λy 121	
)b 121	SPSPAIDSNTDYPGPHSFDVSFQQSSTAKSAT#TYSTELKKLYCQIAKTCPIQIKVMTPP 180
λy 181	
3b 181	PGGAVIRAMPVYKKAEHVTEVVKRCPNHELSREFNEGQIAPPSHLIRVEGNSHAQYVEDP 240
λy 241	241 ITGRQSVLVPYEPPQVGTEFTTVLYNFMCNSSCVGGMNRRPILLIVTLETRDGQVLGRRC 300

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241 ITGROSVLVPYEPPQVGTEFTTVLYNFMCNSSCVGGMNRRPILIIVTLETRDGQVLGRRC 300
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GENERAL INFORMATION:
APPLICANT: Wang, Tongtong
APPLICANT: Fan, Liqun
APPLICANT: Fan, Liqun
APPLICANT: Bangur, Chaitanya S.
APPLICANT: Bangur, Chaitanya S.
APPLICANT: Bangur, Chaitanya S.
APPLICANT: Bangur, Chaitanya S.
APPLICANT: Honger, Gary R.
APPLICANT: Wang, Aijun
APPLICANT: Henderson, Robert A.
APPLICANT: Henderson, Robert A.
APPLICANT: Honderson, Robert A.
APPLICANT: Moneill, Patricia D.
APPLICANT: AND DIAGNOSIS OF LUNG CANCER
TITLE OF INVENTION: AND DIAGNOSIS OF LUNG CANCER
TITLE OF INVENTION: AND DIAGNOSIS OF LUNG CANCER
CURRENT FILING DATE: 2000-08-21
CURRENT FILING DATE: 2000-08-21
SORTWARF. PARTER OF FOR WINDAMARE: PARTER OF SORTWARF.
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Patent No. 6426072
GENERAL INFORMATION:
                                                                                                                                        Sequence 339, Application US/09643597 patent No. 6426072
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Wang, Tongtong
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: PRT
ORGANISM: Homo sapiens
US-09-643-597-339
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                                                                                                                                                                      0; Gaps
                                               APPLICANT: Kalos, Michael D.
APPLICANT: Ralos, Michael D.
APPLICANT: Bangur, Chaltenya S.
APPLICANT: Hosken, Nancy
APPLICANT: Hosken, Gary R.
APPLICANT: Li, Samuel X.
APPLICANT: Li, Samuel X.
APPLICANT: Weng, Alin A.W.
APPLICANT: Henderson, Robert A.
APPLICANT: Henderson, Robert A.
APPLICANT: Honelll, Patricia D.
TITLE OF INVENTION: AND DIAGNOSIS OF LUNG CANCER
TITLE OF INVENTI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           tch 91.5%; Score 410; DB 4; Length 516; al Similarity 100.0%; Pred. No. 0; O; Indels 410; Conservative 0; Mismatches 0; Indels
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                                                                                                                                                                                                                                                             LVEPRRETPKQSDVFFRHSKPPNRSVYP 448
                                                                                                                                                                                                                                                                                                                                                                                        , Sequence 344, Application US/09643597 ; Patent No. 6426072
                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Wang, Tongtong
APPLICANT: Fan, Liqun
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              , ORGANISM: Homo sapiens
US-09-643-597-344
                                                                                                                                                                                                                                                                                                                                                                                                                                       GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           301
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                                                                                                                                                                                                                                                                                                                                                                      RESULT 2
US-09-643-597-344
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Best Local Si
Matches 410;
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Gaps
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Patent No. 6387628

GENERAL INFORMATION:
APPLICANT: Little, Daniel
APPLICANT: Little, Daniel
APPLICANT: Migdins, G. Scott
APPLICANT: Moster, Hubert
APPLICANT: Lough, David
TITLE OF INVENTION: Mass Spectrometric Detection of Polypeptides
FILE REFERENCE: 2016C
CURRENT APPLICATION NUMBER: US/09/664,977A
CURRENT APPLICATION NUMBER: 09/146,054
PRIOR FILING DATE: 1998-09-02
PRIOR FILING DATE: 1998-09-02
PRIOR FILING DATE: 1997-09-02
NUMBER OF SEQ ID NOS: 9
SOFTWARE: PatentIn Ver. 2.0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LOCATION: (14)..(38)
OTHER INFORMATION: "Gln" repeat region associated with spinal
OTHER INFORMATION: cerebellar ataxia 1 (SCA-1)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DB 4; Length 71;
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                          Indels
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; Patent No. 6083709
; GENERAL INFORMATION:
   APPLICANT: Reynolds, Frederick H.
   APPLICANT: Sorvillo, John M.
   APPLICANT: Stephenson, John R.
   APPLICANT: Stephenson, John R.
   TITLE OF INVENTION: Immunoassay for Detection of TITLE OF INVENTION: mutant p53 polypeptide in TITLE OF INVENTION: biological fluids
Best Local Similarity 100.0%; Pred. No. 0.19; Matches 9; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 2.0%; Score 9; DB 4
Best Local Similarity 100.0%; Pred. No. 0.1
Matches 9; Conservative 0; Mismatches
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NAME/KEY: REPEAT
LOCATION: (66)..(71)
HER INFORMATION: 41s-6 "tag"
US-09-664-977A-9
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CORRESPONDENCE ADDRESS:
ADDRESSEE: Cooper an
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ORGANISM: Homo sapiens
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STATE: New York
COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURE:
NAME/KEY: REPEAT
LOCATION: (14)..(
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LENGTH: 71
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APPLICANT: Little, Daniel
APPLICANT: Highins, G. Scott
APPLICANT: Koster, Hubert
APPLICANT: Lough, David
APPLICANT: SEQUENCM, INC.
TITLE OF INVENTION: Mass Spectrometric Detection of Polypeptides
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURE:
NAME/KEY: REPEAT
LOCATION: (14)...(38)
OTHER INFORMATION: "Gln" repeat region associated with spinal
OTHER INFORMATION: cerebellar ataxia 1 (SCA-1)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 635;
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                                                                                              COMPUTER: 1bm Cumpa.Lill
OPERATING SYSTEM: Windows
SOFFWARE: FastSED for Windows Version 2.0b
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/081,975
FILING DATE: 12-MAY-1998
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 60/046,207
FILING DATE: 12-MAY-1997
ATTORNEY/AGENT INFORMATION:
NAME: Elsenstein, Ronald I
REGISTRATION NUMBER: 30,628
REFERENCE/DOCKET NUMBER: 30,628
REFESENCE/DOCKET NUMBER: 47400
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 4.9%; Score 22; DB 4; Le Best Local Similarity 100.0%; Pred. No. 1.8e-13; Matches 22; Conservative 0; Mismatches 0;
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CURRENT FILING DATE: 1998-09-02
EARLIER APPLICATION NUMBER: 08/922,201
EARLIER FILING DATE: 1997-09-02
NUMBER OF SEQ ID NOS: 9
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; Sequence 9, Application US/09146054
; Patent No. 6322970
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; OTHER INFORMATION: His-6 "tag"
US-09-146-054-9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              INFORMATION FOR SEQ ID NO: 3:
                                                            MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE CHARACTERISTICS:
LENGTH: 635 amino acids
TYPE: amino acid
STRANDEDNESS: single
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SEQ ID NO 9
LENGTH: 71
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                                              COMPUTER READABLE FORM:
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ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ; TOPOLOGY: linear
US-09-081-975-3
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APPLICANT: Reynolds, Frederick H.
APPLICANT: Scrvillo, John M.
APPLICANT: Scheb, Ron J.
APPLICANT: Stehb, Ron J.
APPLICANT: Stehb, Ron J.
APPLICANT: Stephenson, John R.
APPLICANT: School R.
APPLICANT: S
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PRIOR APPLICATION DATA:
PRIOR APPLICATION DATA:
FILING DATE: 21-JUC-1986
FILING DATE: 21-JUC-1985
PRIOR APPLICATION DATA:
FILING DATE: 18-JUC-1986
PRIOR APPLICATION DATA:
PRIOR APPLICATION DATA:
PRILING DATE: 19-JUC-1986
PRIOR APPLICATION DATA:
APPLICATION DATA:
APPLICATION DATA:
APPLICATION DATA:
APPLICATION DATA:
FILING DATE: 20-JUC-1986
PRIOR APPLICATION DATA:
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FILING DATE: 14-AUG-1986
ATTORNEY/AGENT INFORMATION:
NAME: White, John P.
REGISTRATION NUMBER: 28,678
REPERENCE/DOCKET VUMBER: 23384-B
TELECOMMUNICATION:
TELEPHONE: (212) 977-9550
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SOFTWARE: Patentin Release #1.24
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US92/00878
FILING DATE: 19920131
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PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 298,837
FILING DATE: 18-JAN-1989
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 885,627
FILING DATE: 23-JUL-1986
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PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 719,172
FILING DATE: 21-UON-1991
PRIOR APPLICATION NUMBER: US 649,566
FILING DATE: 01-FEB-1991
PRIOR APPLICATION DATA:
PRIOR APPLICATION NUMBER: US 649,566
FILING DATE: 17-JAN-1989
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COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                              Sequence 3, Application PC/TUS9200878 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADDRESSEE: Cooper and Dunham STREET: 30 Rockefeller Plaza CITY: New York COUNTR: New York COUNTR: USA
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(212) 664-0525
                                                                                                                                    127 GGMNRRPIL 135
                               275 GGMNRRPIL 283
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2.0%; Score 9; DB 3; Length 169;
Best Local Similarity 100.0%; Pred. No. 0.42;
Matches 9; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                    FILING DATE:

PLILING JATE:

RICHASSIFICATION: 435

RICHASCELECATION DATA:

APPLICATION NUMBER: US 719,172

FILING DATE: 21-UNN-1991

RATOR APPLICATION DATA:

APPLICATION NUMBER: US 649,566

FILING DATE: 01-FEB-1991

RAPPLICATION NUMBER: US 298,776

FILING DATE: 17-JAN-1989

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 298,837

FILING DATE: 23-UL-1986

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 767,862

FILING DATE: 21-AGG-1985

PRIOR APPLICATION DATA:

APPLICATION DATA: US 66,260

FILING DATE: 19-AGG-1986

PRIOR APPLICATION DATA:

APPLICATION DATA: US 767,862

FILING DATE: 19-AGG-1986

PRIOR APPLICATION DATA: US 66,260

FILING DATE: 19-AGG-1986

PRIOR APPLICATION DATA: APBELICATION DATA: APPLICATION DATE: APPLICATION DATE: APPLICATION DATE: APPLICATION UNMBER: APPLICAT
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.24
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/094,071
FILING DATE:
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CLONE: activated p53 oncogene
PUBLICATION INFORMATION:
AUTHORS: Bartek , J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LENGTH: 169 amino acids
TYPE: amino acid
STRANDEDNESS: single
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MOLECULE TYPE: protein
HYPOTHETICAL: N
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PAGES: 893-899
DATE: 1990
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JOURNAL:
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CLONE: activated p53 oncogene
CLONE: activated p53 oncogene
PUBLICARION INFORMATION:
AUTHORS: Bartek, J.
AUTHORS: Iggo, R.
AUTHORS: Lane, D. P.
TITLE: Genetic and immunochemical analysis of mutant p53 in
TITLE: human breast cancer cell.lines
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US-08-094-071-2
Sequence 2, Application US/08094071
Sequence 2, Application US/08094071
Septent No. 6083709
APPLICANT: Reynolds, Frederick H.
APPLICANT: Sorvillo, John M.
APPLICANT: Stephenson, John R.
TITLE OF INVENTION: mutant p53 polypeptide in TITLE OF INVENTION: mutant p53 polypeptide in TITLE OF INVENTION: biological fluids
NUMBER OF SEQUENCES: 7
CORRESPONDENCE ADDRESS:
ADDRESSEE: Cooper and Dunham STREET: 30 Rockefeller Plant
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 9; DB 5;
Pred. No. 0.42;
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APPLICATION NUMBER: US/08/094,071
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 719,172
FILING DATE: 21-UNW-1991
PRIOR APPLICATION DATA:
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FILING DATE: 01-FEB-1991
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 298,776
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PRIOR APPLICATION DATA:
INFORMATION FOR SEQ ID NO: 3
SEQUENCE CHARACTERISTICS:
LENGTH: 169 amino acids
TYPE: AMINO ACID
STRANDEDNESS: single
                                                                                                  TOPOLOGY: linear
MOLECULE TYPE: protein
HYPOTHETICAL: N
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            127 GGMNRRPIL 135
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DATE: 1990
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TITLE OF INVENTION: biological fluids
NUMBERS OF SEQUENCES: 7
CORRESPONDENCES: 7
CORRESPONDENCES: 7
CORPUTER READABLE FORM:
MADIUM TYPE: RIDEPY disk
COMPUTER READABLE FORM:
MEDIUM TYPE: IP-1012

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score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

June 28, 2003, 07:35:33 ; Search time 7008 Seconds (without alignments) 11694.278 Million cell updates/sec 1 tcgttgatatcaaagacagt.....gcatcttggtttaaaagaaa 2816 4109280 GenCore version 5.1.6 Copyright (c) 1993 - 2003 Compugen Ltd. 2054640 segs, 14551402878 residues Total number of hits satisfying chosen parameters: nucleic search, using sw model summaries OLIGO_NUC Gapop 60.0 , Gapext 60.0 Post-processing: Listing first 45 Minimum DB seq length: 0 Maximum DB seq length: 200000000 US-09-670-568B-2 2816 gb_un:* gb_vi:* em_ba:* em_fun:* Jb_ro:*
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PAT 15-FEB-2002 Wang,T., Wang,A., Skeiky,Y.A., Li,S.X., Kalos,M.D., Henderson,R.A., Mcneill,P.D., Fanger,N., Retter,M.W., Marnerakis,M., Fanger,G.R., Vedvick,T.S., Carter,D., Watanabe,Y. and Peckham,D.W. Y16961 Homo sapien AX355944 Sequence AR075432 Homo sapi AR075439 Homo sapi AR075439 Homo sapi AX365943 Sequence Homo sapi Homo sapiens Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo. Homo sapi AF075428 Homo sapi AX009538 Sequence AX365942 Sequence Sequence Sequence Sequence Chimera НОШО AX365758 AX365938 linear DNA AX365940 2816 bp 1 Sequence 333 from Patent W00200174. ALIGNMENTS SUMMARIES F116756515 AC063939 AF116771 AX365943 (AF075433 F116756S07 F116756S01 HSP63G01 F116756S06 AX365940 BD000748 AB016072 AX365940.1 GI:18697449 DB Length 100.0 100.0 100.0 51.1 Score 1026 1026 1005 975 RESULT 1 AX365940 LOCUS DEFINITION ACCESSION VERSION KEYWORDS SOURCE ORGANISM REFERENCE AUTHORS Result No. O is the number of results predicted by chance to have a

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Db 841 CATGCCCAGTATGTAGAAGATCCCATCACGGAAGACAGAGTGTGGTACCTTATGAG 900 Q9 CCACCCCAGGTTGGCACTGAATTCACGACACTTTGTATCAG 900 Q9 CCACCCCAGGTTGGCACTGAATTCACGACACTTGTACATTTCATGTGTAACAGCAGT 960 Q9 GTGTTGGAGGTTGGCACTGAATTTAACATTGTTATCATGTGAACAGAGT 1020 Db 961 TGTGTTGGAGGGTGAACCCGCCGTCCAATTTTAATCATTGTTACTCTGGAAACCAGAGAT 1020 Db 961 TGTGTTGGAGGATGAACCGCGTCCAATTTTAATCATTGTTACTCTGGAAACCAGAGAT 1020 Db 961 TGTGTTGGAGGATGAACCGCGTCCAATTTTAATCATTGTTACTCTGGAAACCAGAGAT 1020 Db 961 TGTGTTGGAGGATGAACCGCGTCCAATTTTAATCATTGTTACTCTGGAAACCAGAGAT 1020 DCTGTTGGAGGATGAACCGCGTCCAATTTTAATCATTGTTACTCTGGAAACCAGAGAT 1020 DCTGTTGGAAACCACGAGAAT 1020 DCTGTTGGAAACCACAGAGAT 1020 DCTGTTGGAAACCACAGAGAT 1020 DCTGTTGGAAACCACACACAT 1020 DCTGTTGAACACCACACATTGTTAATCATTGTTACTCTGGAAACCACAGAAT 1020 DCTGTTGAACACCACACAT 1020 DCTGTTGAACACCACACAT 1020 DCTGTTGAACACCACACAT 1020 DCTGTTGAACACACACAT 1020 DCTGTTGAACACACACATTGTTAATCATTGATCATTGATCATTGAACACACAC	1 GGCAAGTCCTGGGCCGACGCTGCTTTGAGGCCCGGATCTGTGCTTGCCCAGGAAGAGC	Db 1081 AGGAGGCGATGAGATAGCATCAGAAAGCAGCAGGTTTCGGACAGTACAAGAACGGT 1140 Qy 1141 GATGGTACGAAGCGCCGTTTCGTCAGAACACACATGGTATCCAGATGACATCCATC	1201 AAACGAAGATCCCCAGATGATGAACTGTTATACTTACCAGTGAGGGCCGTGAGACTTAT 12	Db 1261 GAAATGCTGTTGAAGATCAAAGAGTCCCTGGAACTCATGCAGTACCTTCCTCAGCACACA 1320 Qy 1321 ATTGAAACGTACAGGAACAGCAACAGCAGCACCAGCACTTACTT	Qy 1381 CTTCAGCCTGCTTCAGGAATGAGCTTGTGGAGCCCCGGAGAGAACTCCAAAACAATCT 1440	AGAGCCCTATC 1:	1501 TCTATATTTTAAGTGTGTGTGTTGTATTTCCATGTGTATATGTGAGTGTGTGT	1561 TGTGTGCGTGTGTATCTAGCCCTCATAAACAGGACTTGAAGACTTTGGCTCAGAGA 162 1561 TGTGTGTGCGTGTGTATCTAGCCTCATAAACAGGACTTGAAGACTTTGGCTCAGAGA 162	1621 CCCAACTGCTCAAAGGCACAAAGCCACTAGTGAGAAATCTTTGAAGGGATCAAACCT 168 111111111111111111111111111111111	1681 TTACAAGAAGGATGTTTTCTGCAGATTTTGTATCCTTAGACCGGCCATTGGTGGTGGTGGTGG 17 1681 TTACAAGAAAGGATGTTTTCTGCAGATTTTGTATCCTTAGACCGGCCATTGGTGGTGGTTGGT	1741 GAACCACTGTGTTTGTCTGTGAGCTTTCTGTTGTTTCCTGGGAGGGGGCTCAGGTGGG 180 [1801 GAAAGGGCATTAAGATGTTATTGGAACCTTTTCTGTCTTCTTCTTTTCTAA 186 	Qy 1861 AATTCACAGGGAAGCTTTTGAGCAGGTCTCCAAACTTAAGAAGGAAAAGGAG 1920 IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII
TITLE Compositions and methods for the therapy and diagnosis of lung cancer JOURNAL PATENT: WO 0200174-A 333 03-JAN-2002; FEATURES LOCATION (US) Source Location/Qualifiers Action/Qualifiers Action/Qualifiers Action/Qualism="Homo sapiens" Adb_xref="texton: 9606" Add_xref="texton: 9606" Add_xref	ch 11 Similarity 100.0%; Score 2816; DB 6; Length 2816; 1816; Conservative 0; Mismatches 0; Indels 0; Gaps 1 nccmqamamcaaagacacamagaagagaa		CAGT 18 CAGT 18 GCCC 24		301 AGCATGGACTGTATCGCATGCAGACTCGGACTGAGTGACCTGTGGCCACAGTACAGTTACGCAGAGTACGAGTACGAGTACGAGTACGAGTACGAGTACGAGTACGAGTACGAGTAGAGTAGAGTAGAGAGAG	CACC 42	ACAG 48 ACAG 48	QY 481 CCCAGGTCCACCTTCGATGCTCTCTCCATCACCGCCATCCCCTCCAACGCGACTAC 540	Qy 541 CCAGGCCGCACAGTTTCGACGTGCCTTCCAGCACGCGCCACCGCCAACTCGGCCACC 600 LIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	OY 601 IGGACGTATTCCACTGAACTGAAGACTCTACTGCCAAATTGCAAAGACATGCCCCATC 660	QY 661 CAGATCAAGGTGATGACCCCACCTCCTCAGGGAGCTGTTATCCGCGCCATGCCTGTCTAC 720 IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	Qy 721 AAAAAAGCTGACGTCACGGAGGTGGTGAAGCGGTGCCCCAACCATGAGCTGAGCCGT 780 LIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	Qy 781 GAATTCAACGAGGGACAGATTGCCCTCCTAGTCATTTGATTCGAGTAGAGGGAACAGC 840 Db

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1 (bases 1 to 2016)

Ikwa,Y., Ikawa,S. and Tatewaki,M.

Chimera gene and chimera protein of p53 family

Patent: JP 2000354488-A 1 26-DEC-2000;
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                  TACTGCTGGGCAGCGAGGTGATCATTACCAAAAGTAATCAACTTTGTGGGGTGGAGAGTTC
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Osada, M., Obba, M., Kawahara, C., Ishioka, C., Kanamaru, R., Katoh, I.,
Ikawa, Y., Nimuray, Y., Nakagawara, A., Obinata, M. and Ikawa, S.
Cloning and functional analysis of human p51, which structurally
and functionally resembles p53
Nat. Med. 4 (7), 839-843 (1998)
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Ikawa,S. and Osada,M.
Ikawa,S. and Osada,M.
Direct Submission
Submitted (10-01-1998) Shuntaro Ikawa, Institute of Development,
Aging and Cancer, Department of Cell Biology; 4-1 Seiryo-machi,
Sendal, Miyagi 980-8575, Japan (E-mail:sikawa@idac.tohoku.ac.jp,
Tel:81-22-717-8488)
Location/Qualifiers
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I basea: 1 to 180055; Adio-Oduola,B., Ali-Osman,F.R., Allen,C., Muzny,D.M., Adams,C., Adio-Oduola,B., Ali-Osman,F.R., Allen,C., Alsbrooks,S.L., Amaratunge,H.C., Are,J.R., Ayele,M., Banks,T., Barbaria,J., Benton,J., Bingae,K., Blankenburg,K., Bonnin,D., Bouck,J., Bowle,S., Bireva,M., Brown,E., Brown,M., Bryant,N.P., Buhay,C., Burch,P., Burkett,C., Burrell,K.L., Byrd,N.C., Carron,T.F., Carter,M., Cavazos,S.R., Chacko,J., Chack,C., Cow,C., Coyle,M.D., Dathorne,S.R., David,R.,
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AF116764.1:236. .318, AF116765.1:201. .337,77. .1516.
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Warren, R., Washington, C., Watlington, S., Wallen, K., Warren, K., Wallington, S., Wallen, S., Wall
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3 (bases 1 to 180055)
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JOURNAL

Direct Submission

COMMENT

Submitted (28-MAR-2002) Human Genome Sequencing Center, Department of Molecular and Human Genetics, Baylor College of Medicine, One Baylor Plaza, Houston, TX 77030, USA On Feb 27, 2002 Lils sequence version replaced gi:17933791.

INFORMATION: http://www.ngsc.bcm.tmc.edu/ or email gc-help@bcm.tmc.edu

CLONE LENGTH: This sequence does not necessarily represent the entire insert of this clone. Overlapping regions of clones are only sequenced and submitted once, so the sequence for the remainder of the insert may be found in the record for the adjacent clones. Overlapping clones are noted at the beginning and end of the Features listing.

ANNOTATION OF FEATURES:

Repeats are identified using RepeatMasker (A. Smit and P. Green, unpublished.) for Human and Mouse sequences. Genes and Region of sequence similarity are identified by BLAST (Nuc. Acids Res. 25:3389-3402) similarity (expect < 1e-34) to the EST and CDNA sequences. Genes demonstrate at least two exons STSs are identified using ePCR (Genome Res. 7:541-550) searches a local database that includes entries from dbSTS, GDB, and local mapping efforts.

repeat_region

flanked by consensus splice sites that maintained sequence continuity across the splice junctions. Sequences that are not identical matches are annotated as similar.

SEQUENCING READ COVERAGE:Sequencing is completed to a minimum standard of double strand coverage with a minimum of 2 clones and 2 reads with no ambiguities or 2 chemistries with a minimum of 2 clones and 3 reads with no ambiguities. If the sequence quality for a region does not meet this standard, it will be indicated in the annotation as Low Coverage.

standards - estimated error rate less than 1 per 10,000 bases. A seports of lowest quality individual bases and measures of base quality are listed below. Description of the metrics can be found at URL: http://gc.bcm.tmc.edu:8088/quality.info/genbank.annotation. QUALITY OF INDIVIDUAL BASES: This sequence meets stringent quality

QUALSTAT-REPORT.

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Catarrhini; Hominidae;
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Primates;
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SVAPSPYRQDSSTFDALSSPAIPSNEDPSTBLK
KLYCOLARTCPTQIRVWATPPPQGAVIRAMPYVKRABHYTEVVRRCPHHELSREFNEGQ
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Chuo-ku, Tokyo 104-0045,
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 2031)
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                                    Yokota,J.
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                                                                 Tani, M., Shimizu, K., Kohno, T., Ikawa, S. and Yokota, J. Direct Submission
Submitted (28-DEC-1998) Biology Division, National Car
Research Institute, 1-1, Tsukiji 5-chome, Chuo-ku, To
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                                Tanl, M., Shimizu, K., Kohno, T., Ikawa, S. and Mutations and expression of the p51 gene in
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/note="p53-11ke"

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/organism="Homo sapiens"
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/chromosome="3"
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  CATGCCCAGTATGTAGAAGATCCCATCACAGGAAGACAGAGAGTGTGCTGGTACCTTATGAG
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Ikawa,Y., Ikawa,S. and Tatewaki,M.
Chimera gene and Chimera protein of p53 family
Patent: JP 2000354488-A. 2 26-DEC-2000;
YOJI IGAWA,OTSUKA PHARMACEUTICAL CO LTD
OS Homo saplens (human)
PD 26-DEC-2000
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/organism="Homo sapiens"
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                                                                                                                                                                           TCGTTGATATCAAAGACAGTTGAAGGAAATGAATTTTGAAACTTCACGGTGTGCCCCCT
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Patent: WO 0200174-A 332 03-JAN-2002;
CORIXA CORPORATION (US)
Location/Qualifiers
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/db_xref="taxon:9606"
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1 TCGTTGATATCAAAGACAGTTGAAGGAATTGAAACTTCACGGTGTGCCACCT 60	301 AGCATGGACTGTATCCGCATGCAGCACTCGAGTGACCCCATGTGGCCACAGTAC 360 16111111111111111111111111111111111	CCACCCCAGGTTGGCACTGAATTCACCACAGTCTTGTACAATTCATGTTAACAGCAGTTTTTTTT

DD 1011 GGGCAMCTOGGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT	IAPPENLINYESCHGG MURRPILLITYLETRAGOVLOFERALOGGROBGOVGTEFTYLYKURNGDG TKRPFRONTHGIOMTSIKKRRSPDDELLYLPVRGRETYEMLKIKESLELMOYLPQGG TKRPFRONTHGIOMTSIKKRRSPDDELLYLPVRGRETYEMLKIKESLELMOYLPQHT ETYRQQQQQQQQQQQQQQQQQQQQQQQQQQQQQQQQQQQQ
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DD 1021 CAGAACACACACGATGCATCCATCAAGAACGAAGATCCCCAGATGATGAA 1080	RESULT 11 AX009538 LOCUS DEFINITION Sequence 2 from Patent W09961610. ACCESSTON AX009538 VERSION AX009538.1 G1:9996812 KEYWONDS SOURCE SOURCE ORGANISM STITLE THILE THORY BAMDETGEN CONSTRUCT JOURNAL BAMBERGER CASIANT (DB): FRAUNHOFER GES FORSCHUNG (DE): CHALLE HARTWIG (DB): FRAUNHOFER GES FORSCHUNG (DE): ACHALLE HARTWIG (DB): FRAUNHOFER GES FORSCHUNG (Ouery Match Best Local Similarity 100.0%; Pred. No. 0; Matches 1275; Conservative 0; Mismatches 0; Indels 0; Gaps 0; Matches 1275; Conservative 0; Mismatches 0; Indels 0; Gaps 0; 102 CCCAGCTCATTCTCTGGAAAGAAGTTATTACCGATCCCAGAGCACA 161
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Clohing and chromosomal mapping of the human p53-related KET gene
to chromosome 3q27 and its murine homolog Ket to mouse chromosome
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		_							X.								816;	°;	TGTGCC	STGTGC	ATTTC	ATTTCI	AATTCC	AATTCC	CAGITC	CAGTIC	
7	•								THE THERAPY								Length 2816;	Indels	TCGTTGATATCAAAGACAGTTGAAGGAAATGAATTTTGAAACTTCACGGTGTGCCCCT	TCGTTGATATCAAAGACAGTTGAAGGAAATGAATTTTGAAACTTCACGGTGTGCCCCCT	ACAGTACTGCCCTGACCCTTACATCCAGCGTTTCGTAGAAACCCCAGCTCATTTCTCTTGG	ACAGTACTGCCCTGACCCTTACATCCAGCGTTTCGTAGAAACCCAGCTCATTCTCTTGG	AAAGAAAGTTATTACCGATCCACATGTCCCAGAGCACACAGACAAATGAATTCCTCAGT	AAAGAAAGTTATTACCGATCCACCATGTCCCAGAGCACACAGACAAATGAATTCCTCAGT	CCAGAGGTTTTCCAGCATATCTGGGATTTTCTGGAACAGCCTATATGTTCAGTTCAGCCC	CCAGAGGTTTTCCAGCATATCTGGGATTTTCTGGAACAGCCTATATGTTCAGTTCAGCCC	
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	\mathcal{C}_{\perp}	_	\setminus	(METHODS FOR	; ;			_				6	o,	SAATTT	SAATTT	rtrcgr,	TTCGT	CAGAGC	CAGAGC	CTGGAA	TGGAA	
	2	3)	<i>'</i>		•					13,597		on 3.0				Score 2816;	Mismatches	GAAATO	GAAATO	CAGCG	CAGCG	TGTCC	TGTCC	ATTTC	SATTTC	
		s.					A.		COMPOSITIONS AND	,	109/64	7.	Windows Version					<u>,</u>	TTGAAG	TTGAAG	TACATO	TACATO	CCACC	CCACCA	TCTGGG	TCTGG	
pud	,	Alchael D. Chaitanya	, 		:	Skeiky, Yasir A.W.	Henderson, Robert A.	McNeill, Patricia D.	COMPOSITIONS AND DIAGNOSIS	210121.455C11	ER: US	-90-000 369	indows				100.08;		AGACAG	AGACAG	GACCCI	GACCCT	ACCGAT	ACCGAT	AGCATA	AGCATA	
MATION: Wang, Tongtong	ıqun	Kalos, Michael D Banqur, Chaitany	, Nancy	ranger, cary k Li. Samuel X.	Aijun	, Yasi	son, R	_		Ξ	N NUMB	E: 20	ы			sapiens		ervati	TATCAR	TATCAR	TGCCCT	TGCCCT	GTTATT	GTTATT	TTTTC	TTTTCC	
GENERAL INFORMATION: APPLICANT: Wang, T	Fan, Liqun	Kalos, N Banqur,	Hosken,	ranger Li. Sa	Wang, Aijun	Skeiky	Hender	McNe11	TITLE OF INVENTION:	CE: 2		CURRENT FILING DATE: NUMBER OF SEQ ID NOS:	FastSEQ for		o	0	Query Match	Matches 2816; Conservative	CGTTGA	CGTTGA	CAGTAC	CAGTAC	AAGAAA	AAGAAA	CAGAGG	CAGAGG	
INFOR	ANT:	ANT:	ANT:	ANT	ANT:	ANT:	ANT:	ANT:	OF INV	EFEREN	T APPL	T FILLI OF SE	RE: F	NO 333	LENGTH: 2816 TYPE: DNA	ORGANISM: Homo 9-643-597-333	atch	2816;	Η-	- =	61 A	61 A	121 A	121 A	181	181 C	
ENERAL INF APPLICANT:	APPLICANT	APPLICANT: APPLICANT:	APPLICANT	APPLICANT	APPLICANT	APPLICANT	APPLICANT	APPLICANT	TITLE	FILE REFERENCE:	CURREN	CUKKEN	SOFTWARE:	SEQ ID NO 333	LENGTH: 2 TYPE: DNA	; · ORGANISM: Homus-09-643-597-333	Query Match	atches									
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US-09-643-597-332 US-09-643-597-335 US-09-643-597-335 US-09-643-597-334 US-09-643-597-334 US-09-643-597-331 US-09-643-597-331 US-08-22-177A-152 US-08-222-177A-152 US-08-469-802B-27 US-08-469-802B-29 US-08-222-177A-149 US-08-222-177A-149 US-08-222-177A-149 US-08-222-177A-19 US-08-222-177A-19 US-08-903-139B-11 US-08-903-139B-12 US-08-903-139B-13 US-08-903-139B-14 US-08-903-139B-14 US-08-903-139B-14

Sequence Seq

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OY 2461 CTGAPACTGTTCAGTGCATTTAGCCAGGAGACTTACGTTTTGAGTAAGTGAGATCCAAGC 2520	q 0 .	181 CCAGAGGTTTTCCAGCATATCTGGGATTTTCTGGAACAGCCTATATGTTCAGTTCAGCCC 240
	y g	241 ATTGACTTGAACTTTGTGGATGAACCATCAGAAGATGGTGCGACAAACAA
OY 2521 AGACGTGTTAAAATCAGCACTCCTGGACTGGAAATTAAAGATTGAAAGGGTAGACTACTT 2580	o ko	AGCATGGACTGTATCCGCATGCAGGACTCGACCTGAGTGCCCCATGTGCCACGTACTATATATA
Qy 2581 TTCTTTTTTACTCAAAAGTTTAGAGAATCTCTGTTTCCATTTTAAAAACATATT 2640	d g	AGCATGGACTGTATCCGCATGCAGGACTCGGACTGAGTGACCCCATGTGGCCACAGTAC 3 ACGAACCTGGGGCTCCTGAACAGCATGGACCAGCAGATTCAGAACGGCTCCTCGTCCACC 4
Qy 2641 TJAAGATAATAGCATAAAGACTTTAAAAATGTTCCTCCCTCC	O O	L ACGAACCTGGGGCTCCTGAACAGCATGGACCAGCAGATTCAGAACGGCTCCTCGTCCACC 4 L AGTCCCTATAACACAGACCACGCGCAGAACAGCGTCAGGGCGCCTCGCCCTAGGCACAGG 4
Qy 2701 CACCAGCACTGTATTTCTGTCACCAAGACAATGATTTCTTGTTATTGAGGCTGTTGCTT 2760 Db 2701 CACCAGCACTGTATTTCTGTCACCAAGACAATGATTTCTTGTTATTGAGGCTGTTGCTT 2760	å ö i	21 AGTCCCTATAACACAGACCACGCAGAACAGCGTCACGGCGCCCTCGCCCTACGCAGAG 81 CCCAGCTCCACCTTCGATGCTCTCTCTCTCATCACCGCGCCATCCCTCCAACACGACTAC
Qy 2761 TTGTGGATGTGTGATTTTAATTTTCAATAACTTTTGCATCTTGGTTTAAAGAAA 2816 	g & g	6 6
RESULT 2 US-09-643-597-332 ; Sequence 332, Application US/09643597	δ da	601 TGGACGTATTCCACTGAACTGAAAACTCTACTGCCAAATTGCAAAGACATGCCCCATC 660
GENERAL INFORMATION: 04.40U/z GENERAL INFORMATION: APPLICANT: Wang, Tongtong APPLICANT: Fan, Liqun	o d	661 CAGATCAAGGTGATGACCCACCTCCTCAGGGAGCTGTTATCCGCGCCATGCCTGTCTAC 720
	δ da	721 AAAAAAGCTGAGGACGTCACGGAGGTGGTGAGCGGTGCCCCAACCATGAGCTGAGCGT 780
APPLICANT: L1, Samuel X. APPLICANT: Skeiky, Yasir A.W. APPLICANT: Henderson, Robert A.	o da	781 GAATTCAACGAGGACAGATTGCCCCTCCTAGTCATTTGATTCGAGTAGAGGGGAACAGC 840
PEPLICANT: MCNELLI, PATICIA D. TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY TITLE OF INVENTION: AND DIAGNOSIS OF LUNG CANCER FILE REFERENCE: 210121.455C11	QY do	841 CATGCCCAGTATGTAGAAGATCCCATCAGGAAGACAGAGTGTGCTGGTACCTTATGAG 900
CURRENT FILING DATE: US/09/643,597 CURRENT FILING DATE: 2000-08-21 NUMBER OF SEQ ID NOS: 369 SOFTWARE: FastSEQ for Windows Version 3.0	oy da	901 CCACCCCAGGTIGGCACTGAATICACGACAGTCTTGTACAATITCATGTGTAACAGCAGT 960
1	oy da	961 IGTGTIGGAGGATGAACCGCCGTCCAATTTTAATCATIGTTACTCTGGAAACCAGAGAT 1020
48.9%; Score 1376; DB 4; Length 2270; larity 100.0%; Pred. No. 0;	oy du	1021 GGGCAAGTCCTGGGCCGACGCTGCTTTGAGGCCCGGATCTGTGCTTGCCCAGGAAGAGC 1080
Valive U; Mismatches U; Indels U; Gabs ICAAAGACAGTTGAAGGAAATGAATTTTGAAACTTCACGGTGTGCCACCCT ICAAAGACAGTTTTTTTTTTTTTTTTTTTTTTTTTTTTTT	oy Q	1081 AGGAAGGCGGATGAAGATAGCATCAGAAAGCAGCAAGTTTCGGACAGTACAAAGAACGGT 1140
61 ACGITACTGCCTGACCCTACATCGACGTTTCGTAGAAACCTCACGGTGTGCCACCCT 00	<i>ኢ</i> ዊ	1141 GATGGTACGAAGCGCCGTTTCGTCAGAACACACATGGTATCCAGATGACATCCATC
TCAGT	oy O	1201 AAACGAAGATCCCCAGATGATGAACTGTTATACTTACCAGTGAGGGGCCGTGAGACTTAT 1260
181 CCAGAGGTTTCCAGCATATCTGGGATTTTCTGGAACAGCCTATATGGTTCTCAGCC 24	QQ Db	1261 GAAATGCTGTTGAAGATCAAAGAGTCCCTGGAACTCATGCAGTACCTTCCTCAGCACACA 1320

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1002 TACTCTGGAAACCAGAGATGGGCAAGTCCTGGGCCGACGCTGCTTTGAGGCCCGGATCTG 1061
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                                          1062 TGCTTGCCCAGGAAGACAGGAAGGCGGATGAAGATAGCATCACAAAAGCAGCAAGTTTC
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                             TGCAAAGACATGCCCCATCCAGATCAAGGTGATGACCCCCACCTCCTCAGGGAGCTGTTAT
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Skeiky, Yasir A.W.
Henderson, Robert A.
McNeill, Patricia D.
WENTION: COMPOSITIONS AND METHODS FOR '
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Patent No. 6426072
GENERAL INFORMATION:
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Bangur, Chaitanya S
Hosken, Nancy
Fanger, Gary R.
Li, Samuel X.
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Fan, Liqun
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TITLE OF INVENTION:
TITLE OF INVENTION:
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                          1321 ATTGAAACGTACAGGCAACAGCAACAGCAGCAGCACCAGCACTTCAGAAACA 1376
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                                                                                                                                                                                                                                                                                                           THE THERAPY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                APPLICANT: Wang, Tongtong
APPLICANT: Wang, Tongtong
APPLICANT: Ralos, Michael D.
APPLICANT: Bangur, Chaitanya S.
APPLICANT: Bangur, Chaitanya S.
APPLICANT: Hosken, Nancy
APPLICANT: Li, Samuel X.
APPLICANT: Range, Ajun
APPLICANT: Wang, Ajun
APPLICANT: Henderson, Robert A.
APPLICANT: Henderson, Robert A.
APPLICANT: Howerlin, Patricia D.
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE
FILE REFERENCE: 210121,455C11
CURRENT APPLICATION NUMBER: US/09/643,597
CURRENT FILE OF INVENTION: 369
SOUTHWARE: FastSEQ for Windows Version 3.0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Best Local Similarity 100.
Matches 1275; Conservative
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                                                                                                                        Patent No. 6426072
GENERAL INFORMATION:
                                                                                           US-09-643-597-335
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                                                                                                                             CAGAACACACGTGTATCCAGATGACATCCATCAAGAAACGAAGATCCCCAGATGATGAA
                                                                                                                                                                              CTGTTATACTTACCAGTGAGGGCCCGTGAGACTTATGAAATGCTGTTGAAGATCAAAGAG
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      CCAATTTTAATCATTGTTACTCTGGAAACCAGAGATGGGCAAGTCCTGGGCCGACGCTGC
                                       GCCACAGTACACGAACCTGGGGGCTCCTGAACAGCATGGACCAGCAGATTCAGAACGGCTC
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100.0%; Pred. No. 0;
iive 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Kalos, Michael D.
APPLICANT: Ralos, Michael D.
APPLICANT: Bangur, Chaitanya S.
APPLICANT: Bangur, Chaitanya S.
APPLICANT: Fanger, Gary R.
APPLICANT: Fanger, Gary R.
APPLICANT: Skeiky, Yasir A.W.
APPLICANT: Skeiky, Yasir A.W.
APPLICANT: Henderson, Robert A.
APPLICANT: Honderson, Robert A.
APPLICANT: Workell, Patricla D.
TITLE OF INVENTION: AND DIAGNOSIS OF LUNG C.
FILE REFERENCE: 210121.455C11
CURRENT PILING DATE: 2000-08-21
NUMBER OF SEQ ID NOS: 369
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FastSEQ for Windows Version 3.0
                                                                                                                                                                                                                                                                                                                                                                Sequence 336, Application US/09643597
Patent No. 6426072
GENERAL INFORMATION:
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Fan, Ligun
Kalos, Michael D.
Bangur, Chaitanya S
Hosken, Nancy
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FILE REFERENCE: 210121.455C11
CURRENT APPLICATION NUMBER: US/09/643,597
CURRENT FILING DATE: 2000-08-21
NUMBER OF SEQ ID NOS: 369
SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 337
LENGTH: 1551
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Matches 1232; Conservative
                                                                                     TYPE: DNA
CORGANISM: HOMO Sapiens
US-09-643-597-337
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Fan, Liqun
Kalos, Michael D.
Bangur, Chaitanya S
Hosken, Nancy
Fanger, Gary R.
Li, Samuel X.
Wang, Aijun
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        APPLICANT: Henderson, Robert A.
APPLICANT: McNeill, Patricia D.
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR
TITLE OF INVENTION: AND DIAGNOSIS OF LUNG CANCER
CURRENT APPLICATION NUMBER: US/09/643,597
CURRENT FILLING DATE: 2000-08-21
NUMBER OF SEQ ID NOS: 369
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                                                                                                                                                                                   Pred. No. 0;
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Skeiky, Yasir A.W
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Best Local Similarity
Matches 1025; Conserv
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APPLICANT: Ralos, Michael D.
APPLICANT: Bangur, Chaitanya S.
APPLICANT: Bongur, Chaitanya S.
APPLICANT: Honger, Gary R.
APPLICANT: Li, Samuel X.
APPLICANT: Li, Samuel X.
APPLICANT: Wasir A.W.
APPLICANT: Menderson, Robert A.
APPLICANT: Henderson, Robert A.
APPLICANT: McMeill, Particia D.
TITLE OF INVENTION: COMPOSITIONS OF LUNG CANCER
FILE REFERENCE: 210121.455C11
CURRENT FILING DATE: 2000-08-21
NUMBER OF SEQ ID NOS: 359
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Pred. No. 0;
0; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-09-643-597-331
; Sequence 331, Application US/09643597
; Patent No. 6426072
; PREMAL INFORMATION:
; APPLICANT: Wang, Tongtong
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match 29.2%;
Best Local Similarity 99.7%;
Matches 972; Conservative
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Fan, Liqun
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ; ORGANISM: HOW US-09-643-597-331
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
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APPLICANT: Skeiky, Yasir A.W.
APPLICANT: Hang, Aljun
APPLICANT: Handerson, Robert A.
APPLICANT: Honderson, Robert A.
APPLICANT: Hondellon, Robert A.
APPLICANT: MCNeill, Patricia D.
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY
ITILE OF INVENTION: AND DIAGNOSIS OF LUNG CANCER
FILE REPERENCE: 210121.455C11
CURRENT APPLICATION NUMBER: US/09/643,597
CURRENT FILING DATE: 2000-08-21
NUMBER OF SEQ ID NOS: 369
SOFTWARE: FastSEQ for Windows Version 3.0
: EROCTH: 4655
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Pred. No. 0;
0; Mismatches
                                                                                                                                                                                                                                                                                                  Sequence 151, Application US/09643597
Patent No. 6426072
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                          APPLICANT: Wang, Tongtong
APPLICANT: Fan, Liqun
APPLICANT: Kalos, Michael D.
APPLICANT: Bangur, Chaitanya S.
APPLICANT: Hosken, Nancy
APPLICANT: Fanger, Gary R.
APPLICANT: Fanger, Gary R.
APPLICANT: Selfy, Yasir A.W.
APPLICANT: Skeiky, Yasir A.W.
APPLICANT: Honderson, Robert A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      tch 29.3%;
al Similarity 99.9%;
876; Conservative (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: DNA
ORGANISM: Homo sapien
                                                                                                                                                                                                                      |||||||
| 1497 GAAACA 1502
                                                                                                                                                                                                       GAAACA 1376
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Matches 876; Conserv
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US-09-643-597-151
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US-08-222-177A-86/C

Sequence 86, Application US/08222177A

Sequence 86, Application US/08222177A

Patent No. 5582979

Patent No. 5582979

PAPLICANT: Weber, James L.

TITLE OF INVENTION: (dG-dT)n SEQUENCES AND METHODS OF USING SAME NUMBER OF SEQUENCES: 460

CORRESPONDENCE ADDRESS:
                                                APPLICANT: Trischifts, Vincenzo
APPLICANT: Pizzuti, Antonio
APPLICANT: Pizzuti, Antonio
APPLICANT: Vigneri, Riccardo
APPLICANT: Vigneri, Riccardo
APPLICANT: Vigneri, Riccardo
APPLICANT: Vigneri, Riccardo
APPLICANT: Prittita, Lucia
FILE REFERENCE: 9076-098
FILE REFERENCE: 9076-099-11-18
CURRENT APPLICATION NUMBER: 05/09/438,906
CURRENT FILING DATE: 1999-11-18
NUMBER OF SEQ ID NOS: 35
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 12
SEQ ID NO 12
LENGTH: 279
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/222,177A
                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 0.9%; Score 24; DB Best Local Similarity 100.0%; Pred. No. 0.1 Matches 24; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3: DeWitt Ross & Stevens, S.C.
8000 Excelsior Drive, Suite 401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILING DATE:
CLASSIFICATION: 435
PRIOR APPLICATION 10 DATA:
APPLICATION NUMBER: US 07/341,562
FILING DATE: 21-APR-1989
ATTORNEY/AGENT INFORMATION:
NAME: Sara, Charles S.
REGISTRATION NUMBER: 30,492
REFENCE/DOCKET NUMBER: 0965.601
TELECOMMUNICATION INFORMATION:
TELEPHONE: (608) 831-2100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1546 GIGTGTGTGTGTATGTGTGTGC 1569
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                199 GTGTGTGTGTGTGTATGTGTGTGC 222
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TELEFAX: (608) 831-2106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE CHARACTERISTICS:
LENGTH: 39 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COUNTRY: USA
ZIP: 53717-1914
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: nucleic acid
STRANDEDNESS: double
                   GENERAL INFORMATION:
APPLICANT: Goldfine, Ira
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STREET: 8000 Exce
CITY: Madison
STATE: Wisconsin
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6465185
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US-09-438-906-12
                                                                                                                                                                                                                                                                                                                                           TYPE: DNA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      942 ITTCATGTGTAACAGCAGTTGTTGGAGGGATGAACCGCCGTCCAATTTTAATCATTGT 1001
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                     GAACGCCTCCTCGTCCACCAGTCCCTATAACACAGACCACGCGCAGAACAGCGTCACGGC
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                                                                                                 RESULT 9
US-09-438-906-12
; Sequence 12, Application US/09438906
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TOPOLOGY: 11
MOLECULE TYPE:

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Gaps

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DB 4; Length 279; 0.15;

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RESULT 13
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TITLE OF INVENTION: LENGTH POLYMORPHISMS IN
TITLE OF INVENTION: (dc-dA)n.(dg-dT)n SEQUENCES AND METHODS OF USING SAME
NUMBER OF SEQUENCES: 460
CORRESPONDENCE ADDRESS:
ADDRESSEE: DeWilt Ross & Stevens, S.C.
STREET: 8000 Excelsion Drive, Suite 401
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                                                                             Score 23; DB 1; Length 39;
                                                                                                                    0; Indels
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CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/222,177A
                                                                     0.8%; Score 43; 100.0%; Pred. No. 0.48; +1ve 0; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/341,562
FILING DATE: 21-APR-1989
ATTORNEY/AGENT INFORMATION:
NAME: Sara, Charles S.
REGISTATION NUMBER: 30,492
REFERENCE/DOCKET NUMBER: 09865.601
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1546 GTGTGTGTGTGTATGTGTGTG 1568
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                                                                                                                                                                               36 GTGTGTGTGTGTATGTGTGTG 14
                                                                                                                                                                                                                                                                         US-08-222-177A-152/c
; Sequence 152, Application US/08222177A
; Patent No. 5582979
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 12
US-08-469-802B-27/c
; Sequence 27, Application US/08469802B
; Patent No. 5741645
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TOPOLOGY: 11near
MOLECULE TYPE: DNA (genomic)
IMMEDIATE SOURCE:
CLONE: mfd34rs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TELEFAX: (608) 831-2106
                                                                           Query Match 0.8°
Best Local Similarity 100.
Matches 23; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Best Local Similarity 100.
Matches 23; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LENGTH: 40 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ZIP: 53717-1914
COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STATE: Wisconsin
COUNTRY: USA
; IMMEDIATE SOURCE:
; CLONE: mfdl2rs
US-08-222-177A-86
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Madison
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE:
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                                                                                                                                                                                                                                                           RESULT 11
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Gaps
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Sequence 45, Application US/08267803B

Partent No. 5834183

GENERAL INFORMATION:
APPLICANT: Orr, Harry T.
APPLICANT: Chung, Ming-yi
APPLICANT: Cognbi, Huda Y.
TITLE OF INVENTION: Gene Sequence for Spinocerebellar Ataxia
Patent No. 5834183

TITLE OF INVENTION: Type 1 and Method for Diagnosis
NUMBER OF SEQUENCES: 85

CORRESPONDENCE ADDRESS:
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                      APPLICANT: Ranum, Laura P.W.
APPLICANT: Chung, Ming-yi
APPLICANT: Zoghbi, Huda Y
TITLE OF INVENTION: Gene Sequence for Spinocerebellar Ataxia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADDRESSEE: Mueting, Raasch, Gebhardt & Schwappach, P.A.
STREET: P.O. Box 581415
CITY: Minneapolis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 54;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0; Indels
                                                                                                                                           AUDRESSEE: Mueting, Raasch, Gebhardt & Schwappach, STREET: 119 No. 5741645th Fourth Street, Sulte 203 CITY: Minneapolis STATE: MN
                                                                                         Patent No. 5741645
TITLE OF INVENTION: Type 1 and Method for Diagnosis
                                                                                                                                                                                                                                                                          CUNNIXI: OSS.
ZIP: 55401
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/469,802B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DB 1;
0.47;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 0.8%; Score 23; DB Best Local Similarity 100.0%; Pred. No. 0.4 Matches 23; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NAME: Mueting, Ann M.
REGISTRATION NUMBER: 33,977
REFERENCE/DOCKET NUMBER: 110.00030101
TELECOMUNICATION INFORMATION:
TELEPHONE: 612-305-1217
                                                                                                                                                                                                                                                                                                                                                                                        06-JUN-1995
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TELEFAX: 612-305-1225
INFORMATION FOR SEQ ID NO: 27:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATTORNEY/AGENT INFORMATION:
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LENGTH: 54 base pairs
Orr, Harry T.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         612-305-1225
                                                                                                                                           NUMBER OF SEQUENCES: 4.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                55458-1415
                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE: 06 CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STRANDEDNESS:
                                                                                                                                                                                                                                                                    USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-08-469-802B-27
                                                                                                                                                                                                                                                                    COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COUNTRY:
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STATE:
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DNA (genomic)
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Best Local Similarity
Matches 23; Conserv
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) MOLECULE TYPE: DR
; IMMEDIATE SOURCE:
; CLONE: mfd33rs
US-08-222-177A-149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           55401
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COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STREET:
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APPLICANT: Weber, James L.
TITLE OF INVENTION: LENGTH POLYMORPHISMS IN
TITLE OF INVENTION: (dc-da)n.(dd-dT)n SEQUENCES AND METHODS OF USING SAME
NUMBER OF SEQUENCES: 460
CORRESPONDENCE ADDRESS:
ADDRESSEE: DeWitt ROSS & Stevens, S.C.
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                      SOFTWARE PATENTIN Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/267,803B
FILING DAME: 28-JUN-1994
CURASIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: MCCOFFACTOR #10.0030120
REFERENCE/DOCKET NUMBER: 110.00030120
REFERENCE/DOCKET NUMBER: 110.00030120
TELECOMMUNICATION INFORMATION:
TELEPHONE: 612-305-1228
TELEPHONE: 612-305-1228
INFORMATION FOR SEQ ID NO: 45: SEQUENCE CHARACTERISTICS:
LENGTH: 54 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/222,177A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DB 2;
0.47;
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8000 Excelsior Drive, Suite 401
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Pred. No.
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PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/341,562
FILING DATE: 21-ARR-1989
ATTORNEY/AGENT INFORMATION:
NAME: SATA, CHAILSS S.
REGISTRATION NUMBER: 30,492
REFERENCE/DOCKET NUMBER: 09865.601
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1546 GTGTGTGTGTGTATGTGTGTG 1568
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; Sequence 149, Application US/08222177A
; Patent No. 5582979
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LENGTH: 56 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
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STATE: Wisconsin
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53717-1914
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US-08-267-803B-45
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GENERAL INFORMATION:
APPLICANT: Orr, Harry T.
APPLICANT: Chung, Ming-yi
APPLICANT: Chung, Ming-yi
APPLICANT: Coghbi, Huda Y.
TITLE OF INVENTION: Gene Sequence for Spinocerebellar Ataxia
Patent No. 5741645
TITLE OF INVENTION: Type 1 and Method for Diagnosis
NUMBER OF SEQUENCES: 47
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SSEE: Mueting, Raasch, Gebhardt & Schwappach, P.A. F: 119 No. 5741645th Fourth Street, Suite 203 Minneapolis
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100.0%; Pred. No. 0.46;
0.8%; Score 23; DB 1; Length 56; 100.0%; Pred. No. 0.47; ive 0; Mismatches 0; Indels
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COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
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                                                                                                                                                                                                                                                                        44 GTGTGTGTGTGTATGTGTGTG 22
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US-08-469-802B-29
; Sequence 29, Application US/08469802B
; Patent No. 5741645
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Conservative 0;
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CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Mueting, Ann M.
REGISTRATION NUMBER: 33,977
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE/DOCKET NUMBER: 11
TELECOMMUNICATION INFORMATION:
TELEPHONE: 612-305-1217
TELEFAX: 612-305-1225
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CURRENT APPLICATION DATA: APPLICATION NUMBER: US
          Query Match 0.8
Best Local Similarity 100.
Matches 23; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELEFAX: 612-305-1225
INFORMATION FOR SEQ ID NO:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           nucleic acid
EDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
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GENERAL INFORMATION:
APPLICANT: Goldfine, Ira
                                                                                                                                                                                  Wisconsin
                                                                                                                                                                                     COUNTRY: USA
ZIP: 53717-1914
                                                                                          Similarity
                                                                     TYPE: DNA
ORGANISM: H. sapiens
US-09-438-906-12
                                                                                                                                                                                                                                                                                                   STRANDEDNESS:
                                                                                                                                                                              CITY: Madison
                                                                                                                                                                                                                            FILING DATE:
                                                                                                                                                                     ADDRESSEE:
                                                                                                                                                                                 STATE:
                                                                                       Query Match
                                                                                           Best Local
Matches 2
Patent No.
                                                                                                                            RESULT 10
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                                                                                                                                                                                                                                                                    1302/GTACCTTCCTCAGCACACAATTGAAACGTACAGGCAACAGCAACAGCAGCAGCAGCAGCA 1361
                                                                                                                                                                                           642 IGCAAAGACATGCCCCATCCAGATCAAGGTGATGACCCCACCTCCTCAGGGAGGFGTTAT 701
     1362 CTTACTTCAGAAACA 1376
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NGS-08-22-177A-86/C

Sequence 86, Application US/08222177A

Sequence 86, Application US/08222177A

Sequence 86, Application US/08222177A

Sequence 86, Application US/08222177A

PAPALICANT: Weber, James L.

APPLICANT: Weber, James L.

TITLE OF INVENTION: LENGTH POLYMORPHISMS IN

TITLE OF INVENTION: (dG-dA)n.(dG-dT)n SEQUENCES AND METHODS OF USING

NUMBER OF SEQUENCES: 460

NUMBER OF SEQUENCES: 460

CORRESPONDENCE ADDRESS:

CORRESPONDENCE ADDRESS:

Stevens, S.C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
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0.15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0; Indels
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: TSM PC compatible
COMPUTER: PSC PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
APPLICANT: Trischitta, Vincenzo
APPLICANT: Pizzuti, Antonio
APPLICANT: Pizzuti, Antonio
APPLICANT: Vigneri, Riccardo
APPLICANT: Vigneri, Lucia
TITLE OF INVENTION: Polymorphic Human PC-1 Segmences
FILE REPERBUCE: 9076-089
CURRENT APPLICATION NUMBER: 105/9438,906
                                                                                                                                                                                                                                                                                                                                                                                                                              0.9%; Scot. No. 0. 100.0%; Pred. No. 0. Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        E: DeWitt Ross & Stevens, S.C.
8000 Excelsior Drive, Suite 401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CLASSIPICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/341,562
FILING DATE: 21-APR-1989
ATTONNEY/AGENT INFORMATION:
NAME: Sara, Charles S.
NEGISTRATION NUMBER: 30,492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/222,177A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1546 GIGIGIGIGIGIAIGIGIGIGC 1569
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               199 GEGEGEGEGEGETATGEGEGEC 222
                                                                                                                                                                                                   PRIOR APPLICATION NUMBER: 60/108,85;
PRIOR FILING DATE: 1998-11-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TELECOMMUNICATION INFORMATION:
TELEPHONE: (608) 831-2100
TELEFAX: (608) 831-2106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                    NUMBER OF SEQ ID NOS: 35
SOFTWARE: FASTSEQ for Windows
SEQ ID NO 12
LENGTH: 279
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LENGTH: 39 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              24; Conservative
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MOLECULE TYPE:

gence 12, Application US/09438906

.09-438-906-12

RESULT 9

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Jun 30 08:33:15 2003
                                                                                       ; IMMEDIATE SOURCE: 7
; CLONE: mfdl2rs
US-08-22-177A-86
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Query Match 0.8%; Score 23; DB 1; Length 39; Best Local Similarity 100.0%; Pred. No. 0.48; Matches 23; Conservative 0; Mismatches 0; Indels 1546 GIGIGIGIGIGIATGIGIGIG 1568 셤 ð

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Gaps

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US-08-222-177A-152/c

Sequence 152, Application US/08222177A

Sequence 152, Application US/08222177A

Sequence 152, Application US/08222177A

Sequence 152, Application US/08222177A

Patent No. 5582979

SEQUENCE APPLICANT: Weber, James L.

TITLE OF INVENTION: (dc-da)n.(dd-da)n SEQUENCES AND METHODS OF USING SAME NUMBER OF SEQUENCES: 460

CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                          E: DeWitt Ross & Stevens, S.C.
8000 Excelsior Drive, Suite 401
                                                                                                                                                                                                                                                                                                                                          STATE: Wisconsin
                                                                                                                                                                                                                                                                                                                                                                 COUNTRY: USA
ZIP: 53717-1914
                                                                                                                                                                                                                                                                                                                    Madison
                                                                                                                                                                                                                                                             ADDRESSEE:
                                                                                                                                                                                                                                                                                      STREET:
RESULT 11
```

SOFTWARE: Patentin Release #1.0, Version #1.25 CURRENT APPLICATION DATA: APPLICATION NUMBER: US/08/222,177A CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/341,562
FILING DATE: 21-APR-1989
ATTOMING DATE: NORMATION:
NAME: Sara, Charles S.
REGISTRATION NUMBER: 30,492 09865.601 ZİP: 53717-1914
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS FELECOMMUNICATION INFORMATION REFERENCE/DOCKET NUMBER: FILING DATE: NOS 37,490

DNA (genomic) TELEPHONE: (608) 831-2100 TELEFAX: (608) 831-2106 SEQUENCE CHARACTERISTICS LENGTH: 40 base pairs FORMATION FOR SEQ ID NO: nucleic acid EDNESS: double linear ; MOLECULE TYPE: DI ; IMMEDIATE SOURCE: ; CLONE: mfd34rs US-08-222-177A-152 STRANDEDNESS

Gaps ó Query Match 0.8%; Score 23; DB 1; Length 40; Best Local Similarity 100.0%; Pred. No. 0.48; Matches 23; Conservative 0; Mismatches 0; Indels 1546 GTGTGTGTGTGTATGTGTGT 1568

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RESULT 12
US-08-469-802B-27/c
; Sequence 27, Application US/08469802B
; Patent No. 5741645
a
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Gene Sequence for Spinocerebellar Ataxia
                                                                                                                     NUMBER OF SEQUENCES: 47
CORRESPONDENCE ADDRESS:
ADDRESSEE: Mueting, Raasch, Gebhardt & Schwappach,
STREET: 119 No. 5741645th Fourth Street, Suite 203
CITY: Minneapolis
                                                                                                 Type 1 and Method for Diagnosis
                                                                                                                                                                                                                                                                                                                                                                            SOFTWARE: Patentin Release #1.0, Version #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE/DOCKET NUMBER: 110.00030101
TELECOMMUNICATION INFORMATION:
TELEPHONE: 612-305-1217
                                                                                                                                                                                                                                                                                                                                                                                                          UMBER: US/08/469,802B
06-JUN-1995
                                                                                                                                                                                                                                                                                                                                 COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           33,977
Ranum, Laura P.W.
Chung, Ming-yi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATTORNEY/AGENT INFORMATION:
NAME: Mueting, Ann M.
REGISTRATION NUMBER: 33,9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TELEFAX: 612-305-1225
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                CURRENT APPLICATION DATA:
APPLICATION NUMBER: US
                     APPLICANT: Chung, Ming-y
APPLICANT: Zoghbi, Huda
TITLE OF INVENTION: Gene
Patent No. 5741645
TITLE OF INVENTION: Type
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            612-305-1225
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             54 base pairs
                                                                                                                                                                                                                                                                                          COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       linear
                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE: 06
CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; MOLECULE TYPE:
US-08-469-802B-27
                                                                                                                                                                                                                                        Z
                                                                                                                                                                                                                                                                          55401
                                                                                                                                                                                                                                                         COUNTRY:
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Length 54; Indels DB 1; 0.47; Mismatches Score 23; Query Match 0.8%; Sc Best Local Similarity 100.0%; P Matches 23; Conservative 0;

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Gaps

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1546 GTGTGTGTGTGTATGTGTGTG 1568 47 GTGTGTGTGTGTATGTGTG 25 Sequence 45, Application US/08267803B Patent No. 5834183 RESULT 13 US-08-267-803B-45/c g à

Patent No. D83%10.

GENERAL INFORMATION:
APPLICANT: Carlung, Ming-Y1
APPLICANT: Chung, Ming-Y1
APPLICANT: Coghbi, Huda Y1
APPLICANT: Coghbi, Huda Y1
APPLICANT: Soghbi, Huda Y1
APPLICANT: TITLE OF INVENTION: Gene Sequence for Spinocerebellar Ataxia
TITLE OF INVENTION: Type 1 and Method for Diagnosis
TITLE OF INVENTION: Type 1 and Method for Diagnosis CORRESPONDENCE ADDRESS:
ADDRESSEE: Mueting, Raasch, Gebhardt & Schwappach, P.A.
STREET: P.O. Box 581415
CITY: Minneapolis ZIP: 55458-1415 COMPUTER READABLE FORM: MEDIUM TYPE: Floppy COUNTRY:

E: Floppy disk IBM PC compatible

COMPUTER:

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Creation date: 09-22-2004

Indexing Officer: BHULUKA - BEKANA HULUKA

Team: OIPEBackFileIndexing

Dossier: 09670568

Legal Date: 07-07-2003

No.	Doccode		Number of pages
1	SRNT	·	4

Total number of pages: 4

Remarks:

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